Key European Findings (continued)

European Conclusions

Reformulated Switching & Pricing Findings (continued)

8 Nearly all physicians claim they will start their newly diagnosed patients on reformulated products once they are introduced Denmark is the only exception

9 Spanish and Swedish physicians say they will prefer Refacto for their PUPs, while German physicians say they will go with Kogenate SF

10. Patients (56%), more so than physicians (24%), express the need to keep previous generation products on the market.

11 Physicians, at 72%, are more likely than patients (59%) to be influenced by the inability for continuous infusion and room temperature storage Specifically, physicians are more concerned about lack of continuous infusion and patients are more concerned over lack of room temperature storage.

12 Refacto will pose the biggest threat to Recombinate in Europe due to its "first to the market" advantage

13 Physicians are price sensitive Less than half will choose the reformulated product if it is priced more than 5% over the current recombinant FVIII concentrates Danish and Italian physicians are most price sensitive

Several changes occurred in the European market from 1998 to 1999. Some may have been driven by Refacto's entry into this market.

Conclusions

European Findings
-1998 to 1999 Comparison -

- Refacto has entered the market and holds a 6% share among our sample
- Plasma derived usage has dropped from 39% to 31% among our sample
- *Viral safety* remains the top reason to switch
- *Physician recommendation* has decreased as a reason to switch, but *physicians* remain as the top switching influencer
- The advantage held by Recombinate over Kogenate in patients' overall satisfaction and meets safety needs ratings in 1998 no longer exists in 1999 Now they are rated equally.
- Unaided *concern of CJD* rose from 0% to 10%
- *Viral safety in general* is still the top unprompted safety concern, but was mentioned less often than in 1998
- *Long-term clinical experience* and *adverse events* have increased in safety importance
- *Exposure to human/animal proteins in mfg.* has decreased in safety element importance
- Patients' reputation ratings for Baxter and Bayer have increased, but decreased for Centeon
- Awareness of Refacto has grown significantly, while Kogenate SF awareness grew only slightly
- Patient and physician awareness has risen significantly regarding reformulated products *.using albumin to stabilize; still being exposed to proteins in manufacturing,* and *being based on modified Factor VIII gene*
- The percent expecting to switch within 1 year to a reformulated has risen from 53% in 1998 to 59% in 1999 for physicians and dropped from 54% to 45% for patients
- Physicians are more likely now to start PUPs on reformulated products once they are available
- Physicians have become slightly more price sensitive, now less are willing to pay a 20% premium

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European Project Recommendations

Recommendations

Baxter can make several marketing moves to slow the acceptance of Kogenate SF, Refacto and Helixate NexGen, perhaps buying more time than the current window. Specific strategies include:

- Immediately publicize to physicians and patients that Baxter is developing a "protein free" product . ***get the word out.***
- Use proactive and defensive marketing tactics to control the speed at which Recombinate users switch to competing reformulated products . ***act on the drivers and barriers that Baxter can influence.***
- Work vigorously on a "protein free" product with the critical goal of being the first to market ***be the R&D leader.***

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European Recommendations (continued)

Recommendations

Get the Word Out

- publicize to physicians, nurses (in the U.S) and patients that Baxter is developing a "protein free" product and educate everyone on Baxter's new product as early as possible

Proactive Marketing Efforts

- continue promoting Recombinate's track record and Baxter as an established FVIII manufacturer
- continue developing brand identity and loyalty for Recombinate, particularly among professionals
- differentiate via patient education and convenience features (*5 ml infusion volumes, a greater selection of potencies, smaller packaging and improved reconstitution/syringe system*)

Defensive Marketing Efforts

- educate about the *use of human/animal proteins during manufacturing,* refuting (or weakening) the claims that new products will be "albumin free"
- educate about the *use of a modified gene* in new products
- educate about Kogenate SF's potential inability for *continuous infusion* (physician focus) and *room temperature storage* (patient and nurse focus)
- raise questions with physicians about the risks of taking patients off of a single product versus the unsubstantiated reward of an incrementally safer product
- raise questions with physicians about the availability of the newly reformulated concentrates
- raise questions about Wyeth's ability to supply and its commitment to the hemophilia market
- make all efforts to delay the introduction of the reformulated products (*i e persuade prominent physicians to refute the trial results of all new products*)
- if share is slipping rapidly, price Recombinate 10% lower than the reformulated products

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European Recommendations (continued)

Recommendations

Shorten the Window of Exposure

- Physicians and patients need time to review clinical trials prior to switching to a new product If Baxter can get its product to market within the two year window it can potentially avoid losing a large share of its customers
- It typically takes a full year for a physician to see each patient and discuss new products and switching Take advantage of this time to educate, build loyalty and raise doubts about the true benefits of the reformulated products.

First to Market with "Protein Free"

- A "protein free" FVIII concentrate will be seen as a major step-change improvement in safety
- The first company to market with a totally human/animal protein free product should be able to capture a very large percentage of switching patients in a one year time frame, capitalizing on a "first comer" advantage
- Being first to market with a totally safe product would also greatly strengthen the company's reputation and position it as the leader in the Factor VIII replacement market

***

This concludes the presentation.
Thank you very much.

***

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Appendix

- European Physician Respondent List -

MARTEC

GH001101

1999 Baxter Global Hemophilia Study
European Physician Respondent List

Appendix

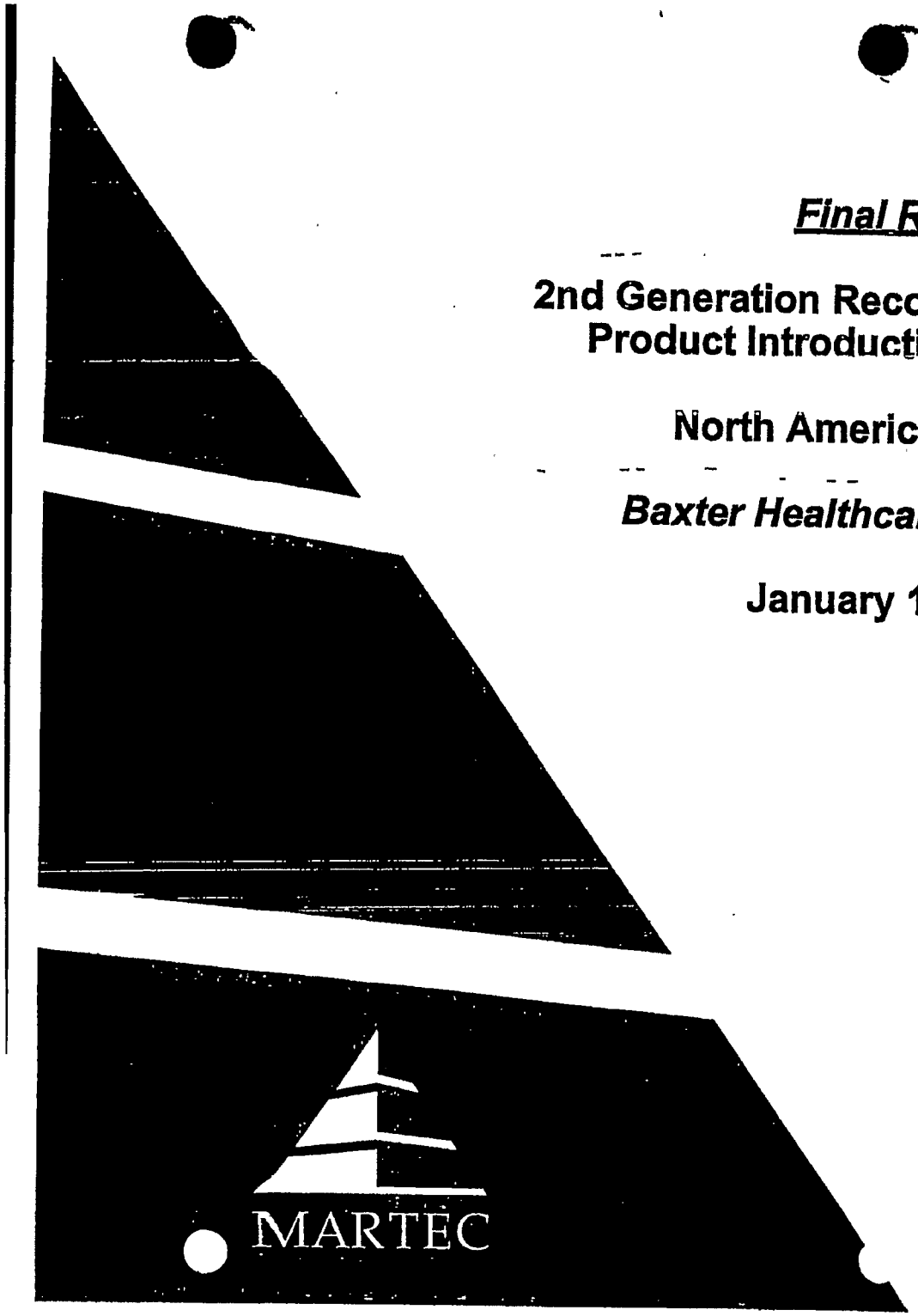
Denmark	Jorgen Ingerslev, MD	Physician	Skejby Hospital	Aarhus	
France	Dr Borel-Derlon	Physician	CHRT Laboratoire D'Hematologie	Caen	3323 1064565
France	Dr Dirat	Physician	Centre d'Hemophiles La Perle	Osseja	3346 8307235
France	Dr Gay	Physician	CHG de Chambery (Centre de tra	Chambery	3347 9965667
France	Dr Gembara	Physician	Hotel-Dieu, Service de pediatr	Clermont-Ferrand	3347 3750000
France	Dr Negner	Physician	Hopital Edouard Herriots	Lyon	33472117338
France	Dr Parquet	Physician	Centre de Traitement des Hemop	Lille	33802802222
France	Dr Pernod	Physician	CHRU Grenoble	Grenoble	33476765487
France	Dr Plouvier	Physician	Hopital Saint-Jacques	Besancon	33381218138
France	Dr Sicardi	Physician	Centre Medical Montgrand	Marseille	3349 1544224
France	Dr Stieltjes	Physician	Centre de Traitment d'Hemophil	Paris	33142341589
Germany	Dr Eberl	Physician	Kinkerklinic Braunschweig	Braunschweig	5315951424
Germany	Dr Rommel	Physician	Uniklinik Munchen	Munchen	82195039
Germany	Dr Siemens	Physician	Uniklinik Lubeck	Lubeck	4515006461
Germany	Dr Wendisch	Physician	Uniklinik Dresden	Dresden	3514582240
Germany	Mrs Dr Kumik-Auerberger	Physician	Haunersche Kinderklinik	Munchen	8951602811
Italy	Dott Baudo Francesco	Physician	Ospedale Niguarda	Milano	390264442970
Italy	Dott Billio Atto	Physician	Ospedale Civile	Bolzano	390471908495
Italy	Dott Boeri Elio	Physician	Istituto Scientifico Gaslini	Genova	390105636551
Italy	Dott Castaman Giancarlo	Physician	Ospedale San Bortolo	Vicenza	390444993679
Italy	Dott Ezio Zano	Physician	Azienda Ospedaliera	Padova	390498212666
Italy	Dott Longo	Physician	Ospedale Careggi	Firenze	390554277587

European Physician Respondent List (continued)

Italy	Dott Piseddu	Physician	Ospedali Riuniti di Sassari	Sassari	390792061518
Italy	Dott ssa Laura Perugini	Physician	Azienda Ospedaliera	Torino	390113135591
Italy	Dott ssa Santarelli Rita	Physician	Ospedale Provinciale Bufalini	Ravenna	
Italy	Dottoressa Schinco Piercarla	Physician	Ospedale Molinette	Torino	393889727503
Spain	Dr Carmen Altisent	Physician	Hospital Vall d'Hebron	Barcelona	34985108000
Spain	Dr Manuel Fernandez Urgeles	Physician	Hospital Neustra Sra De Covad	Oviedo	34985108000
Spain	Dr Manuel Quintana	Physician	Hospital La Paz	Madrid	34915481554
Spain	Dr Rosario Gonzalez Boullousa	Physician	Hospital Xeral de Vigo	Vigo (Galicia)	34986816000
Spain	Dr Victor Jimenez Yuste	Physician	Hospital La Paz	Madrid	34913584191
Sweden	Eric Berntorp, MD	Physician	Malmo University Hospital	Malmo	
Sweden	Pia Petrini, MD	Physician	Karolinska Hospital	Stockholm	
Sweden	Rolf Ljung, MD	Physician	University Hospital Malmo	Malmo	
Sweden	Sam Schulman, MD	Physician	Karolinska Hospital	Stockholm	
UK	Dr Collins	Physician	University Hospital of Wales	Cardis	441222742155
UK	Dr Elizabeth Chalmers	Physician	Hospital for Sick Children	Glasgow	441412010000
UK	Dr FGH Hill	Physician	Birmingham Children's Hospital	Birmingham	441213339999
UK	Dr Makris	Physician	Royal Hallamshire Hospital	Sheffield	441142711900
UK	Dr Mark Smith	Physician	St Thomas Hospital	London	441772611379
UK	Dr Mc Verry	Physician	St James University Hospital	Leeds	441132433144
UK	Dr Paul Giangrande	Physician	Oxford Hemophilia Center	Oxford	441865741841
UK	Dr RF Stevens	Physician	Royal Manchester Children's	Manchester	441617944696
UK	Dr Winter	Physician	Kent & Canterbury Hospital	Kent	441227766877
UK	Professor Pasi	Physician	Licester Royal Infirmary	Leicester	441162523225

2nd Gen. Re VIII

N.A. Findings



Final Report

2nd Generation Recombinant Factor VIII Product Introduction Assessment

North American Findings

Baxter Healthcare Corporation

January 17, 2000

Agenda

- **Objectives and Methodology**
- U S. Findings
- U S. Conclusions
- Canadian Findings
- Canadian Conclusions
- North American Recommendations

MARTFC

The primary goal of this project is to provide Baxter with global market intelligence allowing it to successfully position its recombinant Factor VIII product against competitive next-generation products.

Objectives

The primary objectives of this project are:

- Determine the motivators and drivers of switching behavior. What will cause and prevent switching from Recombinate to a competitive product?
- Understand the perceptions of decision makers on the next generation recombinant products (Kogenate SF, Refacto and Helixate NexGen) coming to market and how this differs from the previous findings

Specific project objectives include:

- Estimate likelihood of switching from Recombinate to new recombinant products
- Compare findings to those of the initial 1998 study, where applicable

This report represents the views of this sample and is just one piece of a strategic marketing plan. Baxter must balance this data with its corporate directives and other internal, competitive and legislative intelligence.

This project was conducted globally and consisted of two distinct phases.

Methodology

Global Scope

The project was conducted concurrently in the following four global regions:

North America	Europe	Asia	Inter-Continental
• United States	• Germany	• Japan	• Australia
• Canada	• France		• New Zealand
	• Italy		
	• Spain		
	• United Kingdom		
	• Denmark		
	• Sweden		

This was a blind study, at no time was Baxter mentioned as the sponsor.

Phase I

Phase I was a focused qualitative phase. Information was gathered via in-depth one-on-one and telephone interviews. This information provided the foundation for the quantitative phase of the research effort.

Phase II

This phase was a quantitative effort, with information gathered via telephone interviews The output of this phase is a detailed understanding of the project objectives This information will allow Baxter to develop strategies that maximize its market positioning

MARTLC

A total of 479 interviews were completed for this study.

Methodology

Country	Respondent Group	Phase I Interviews Completed	Phase II Interviews Completed
U S	Patients	4	100
	Physicians/Nurses	7	65
Canada	Physicians	--	9*
Germany	Patients	2	20
	Physicians	1	5**
France	Patients	2	20
	Physicians	1	10
Italy	Patients	2	20
	Physicians	1	10
Spain	Patients	--	10
	Physicians	--	5
United Kingdom	Patients	2	20
	Physicians	1	10
Denmark	Patients	--	10
	Physicians	--	1†
Sweden	Patients	--	10
	Physicians	--	4††
Japan	Patients	3	54×
	Physicians	2	20
Australia	Patients	2	20
	Physicians	1	10
New Zealand	Patients	--	10
	Physicians	--	5
Total		31	448

Notes

** 1 short of target and includes 1 nurse No more physicians agreed to participate*

*** 5 short of target Only 10 physicians were targeted by Baxter and 5 refused New guideline was just introduced by German Hemophilia Society discouraging participation in any unsponsored studies*

† 4 short of target However, only 3 hemophilia physicians exist in Denmark 1 declined, 1 not available

†† 1 short of target No more physicians agreed to participate

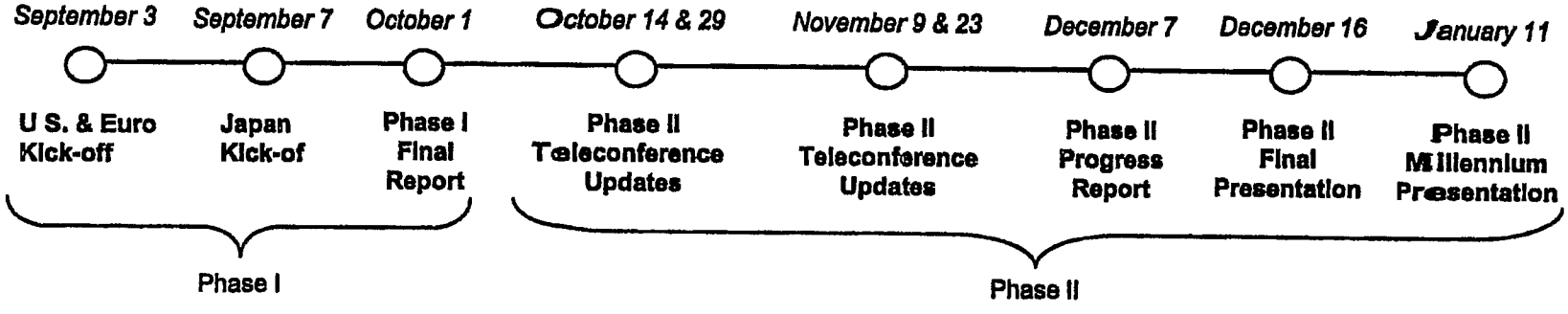
× 6 short of target However, still higher response than expected

In most countries, Baxter provided Martec a list of physicians to target for this study

MARTEC

The project was completed as scheduled.

Project Timeline



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Agenda

- Objectives and Methodology
- **U.S. Findings**
- U S Conclusions
- Canadian Findings
- Canadian Conclusions
- North American Recommendations

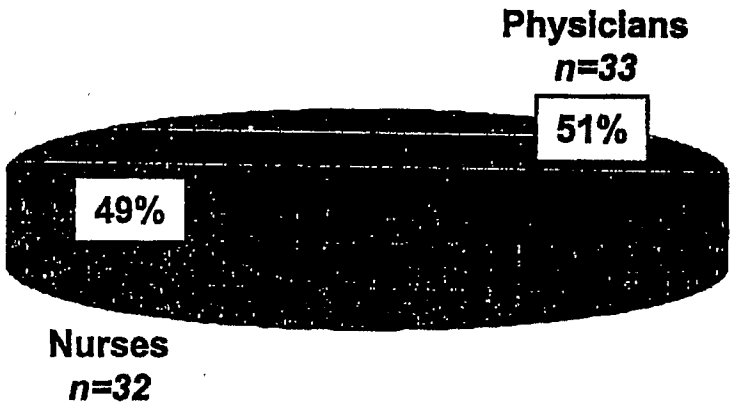
MARTEC

The respondent segmentation matched the quotas set forth by Baxter at the beginning of the project.

U.S. Findings

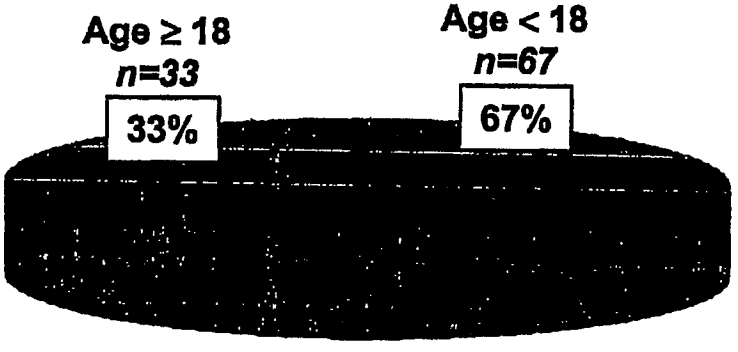
U.S. Respondents
- Phase II -

U.S. Professionals



n = 65

U.S. Patients

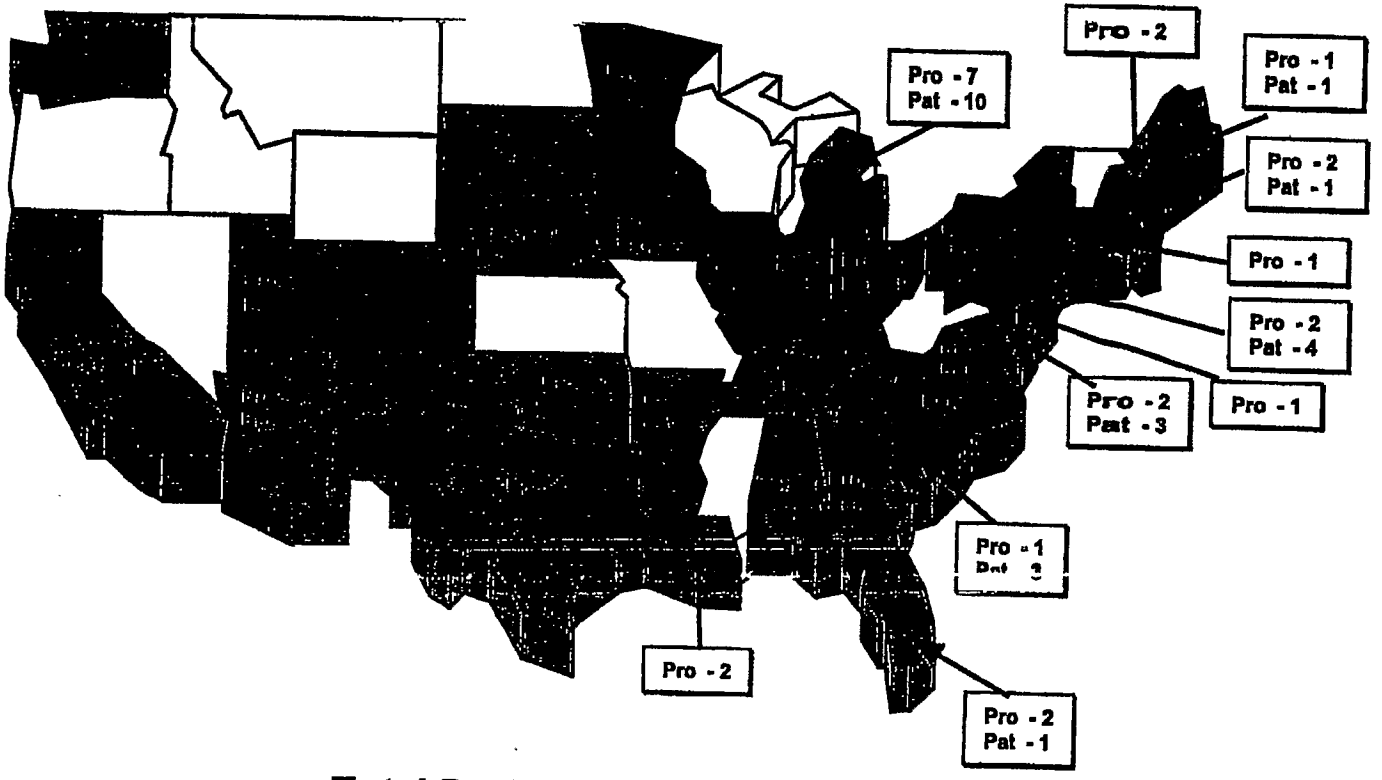


n = 100

MARTEC

Phase II U.S. respondents were distributed geographically.

Phase II Respondents
- by State -



Total Professionals = 65
(from 54 different institutions)
Total Patients = 100

MARTEC

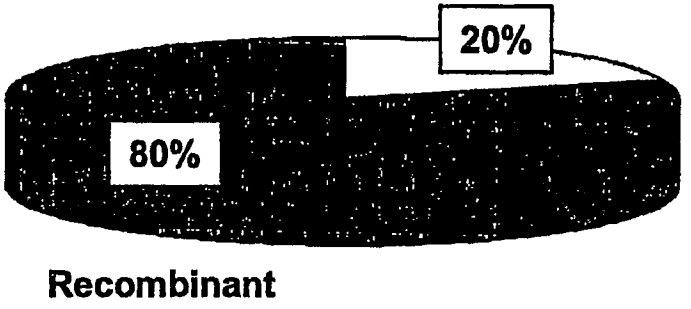
GH001113

Recombinant products, particularly Recombinate, were most often used by the U.S. professionals' patients in this sample.

U.S. Findings

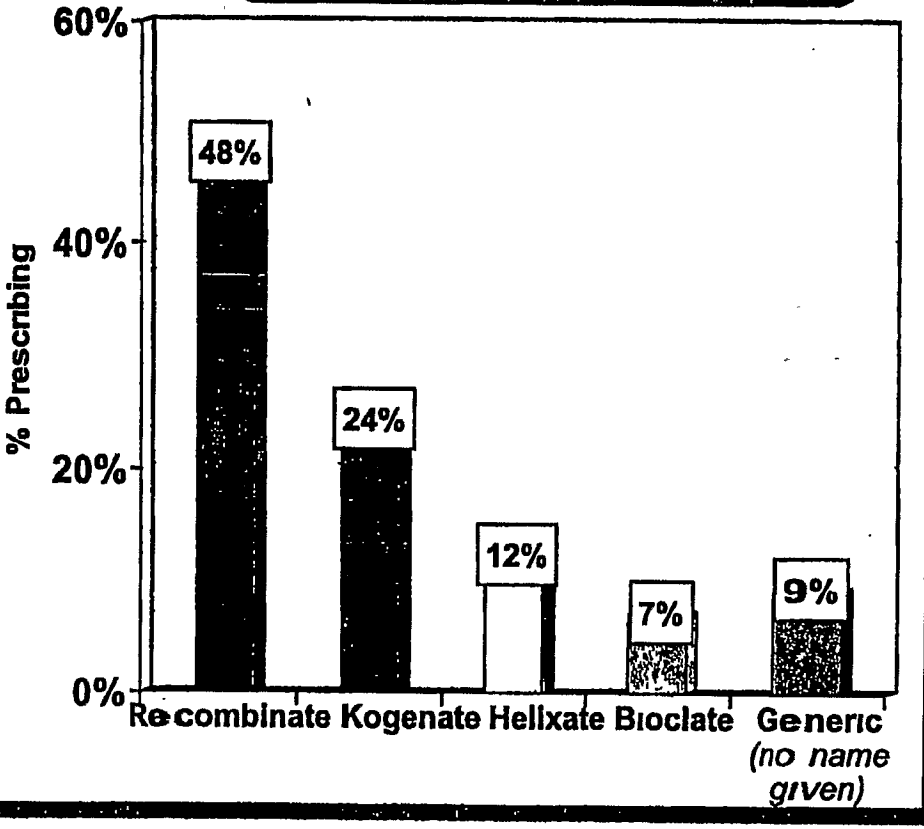
Product Type Used by Patients
- U.S. Professional -

% of Patients-on-Each-Product Type



n = 65

Recombinant Products Used
- % of Recombinant Share -



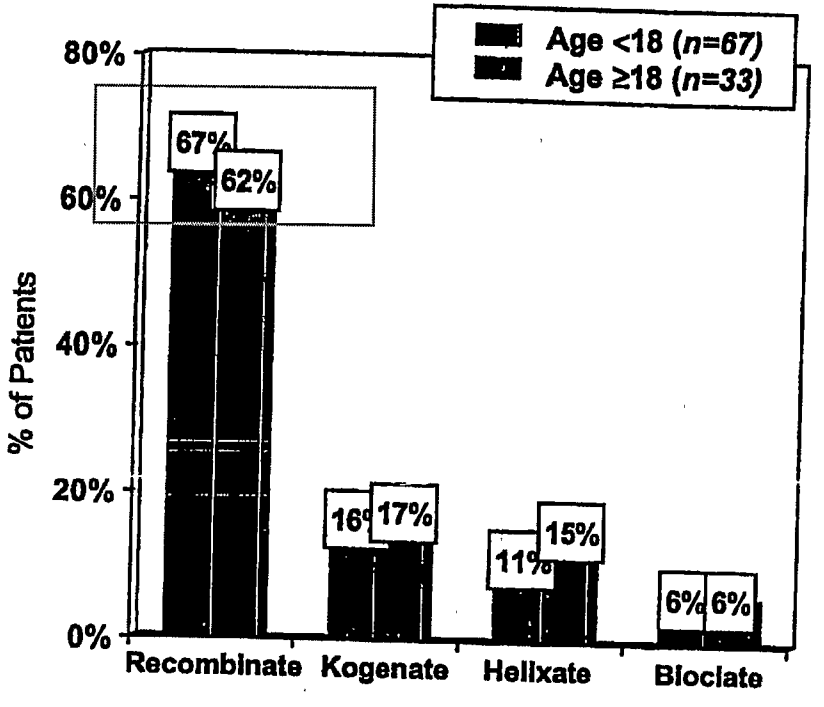
MARIIC

Recombinate is clearly the most common product used by both patient groups in the sample of this study.

U.S. Findings

Product Usage - U.S. Patients -

Current Products Used



n = 100

Most Recently Used Past Product

Monoclate-P	16%
Kogenate	15%
Recombinate	11%
Bioclate	6%
Hemofil M	5%
Helixate	5%
Don't know name	14%
Others*	28%

**None greater than 5%*

Reported no switching	***9%***
• *Ages < 18*	*13%*
• *Ages ≥ 18*	*0%*

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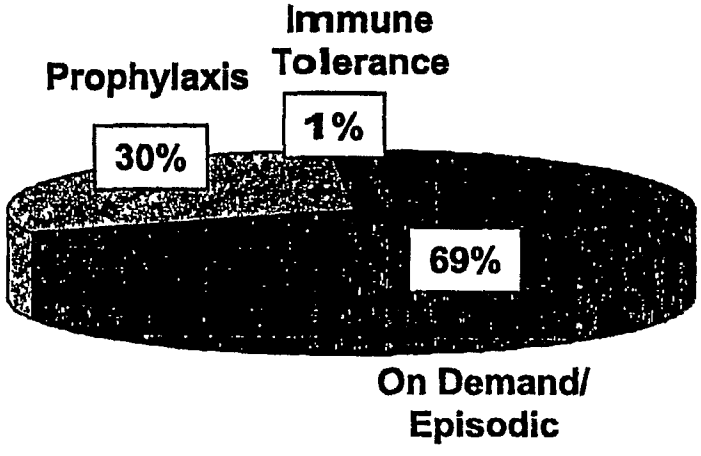
U.S. patients under the age of 18 are three times as likely to follow a prophylaxis treatment program.

U.S. Findings

Current Treatment Regimen

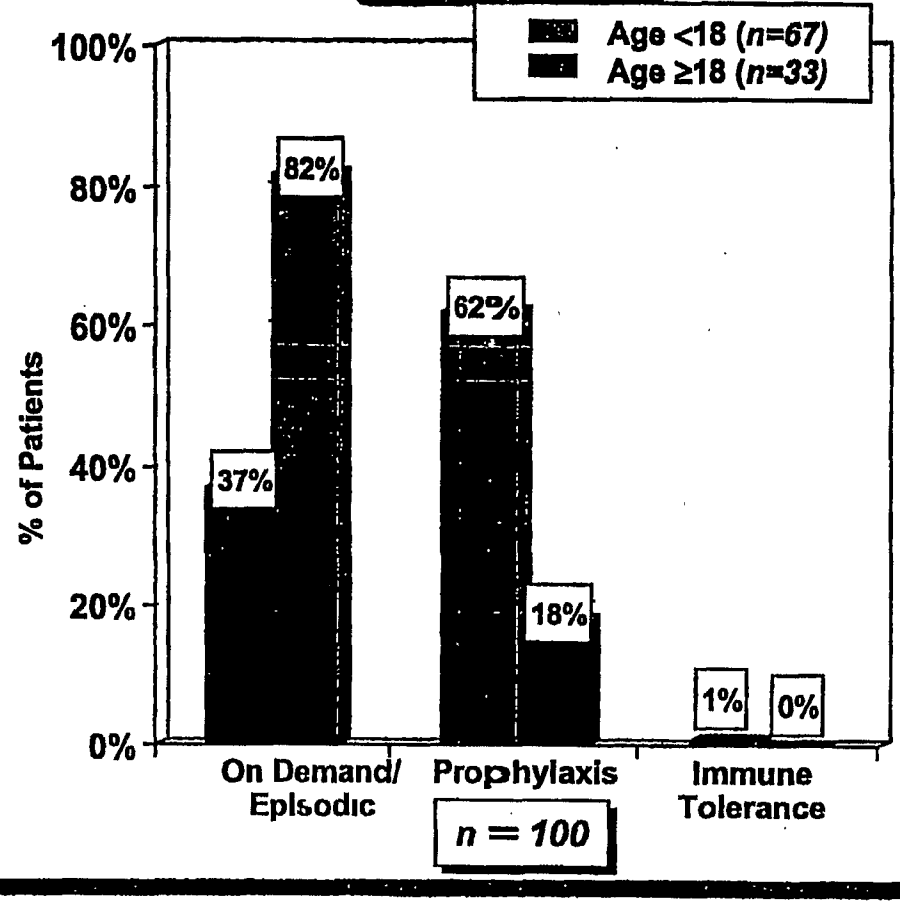
U.S. Professionals

% of patients currently on...



n = 65

U.S. Patients



n = 100

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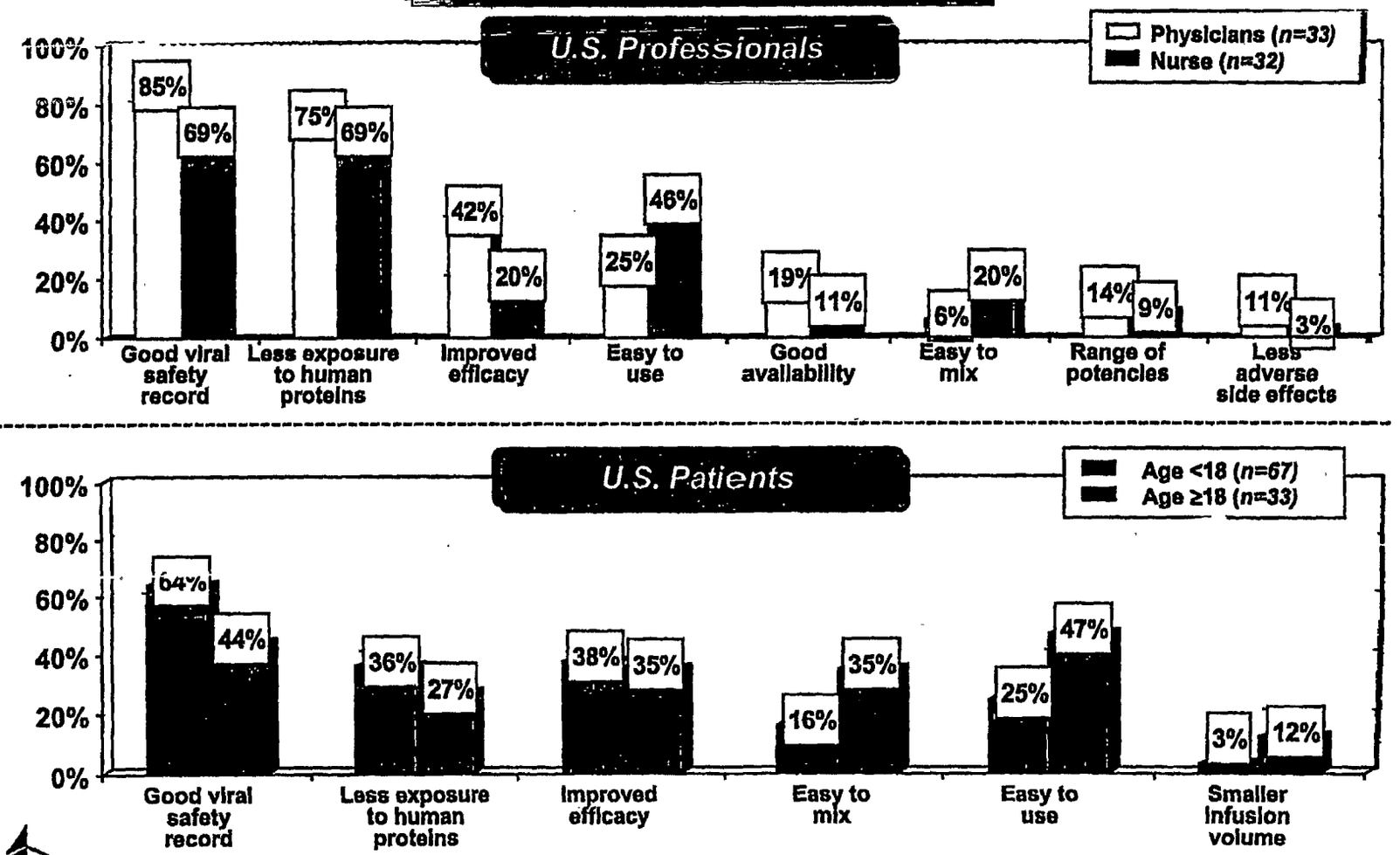
Good Viral Safety **was frequently mentioned as a "Like" by all respondents.** ***Easy to use*** **was frequently mentioned by nurses and older patients.**

U.S. Findings

Current Product "Likes"
- Unaided -

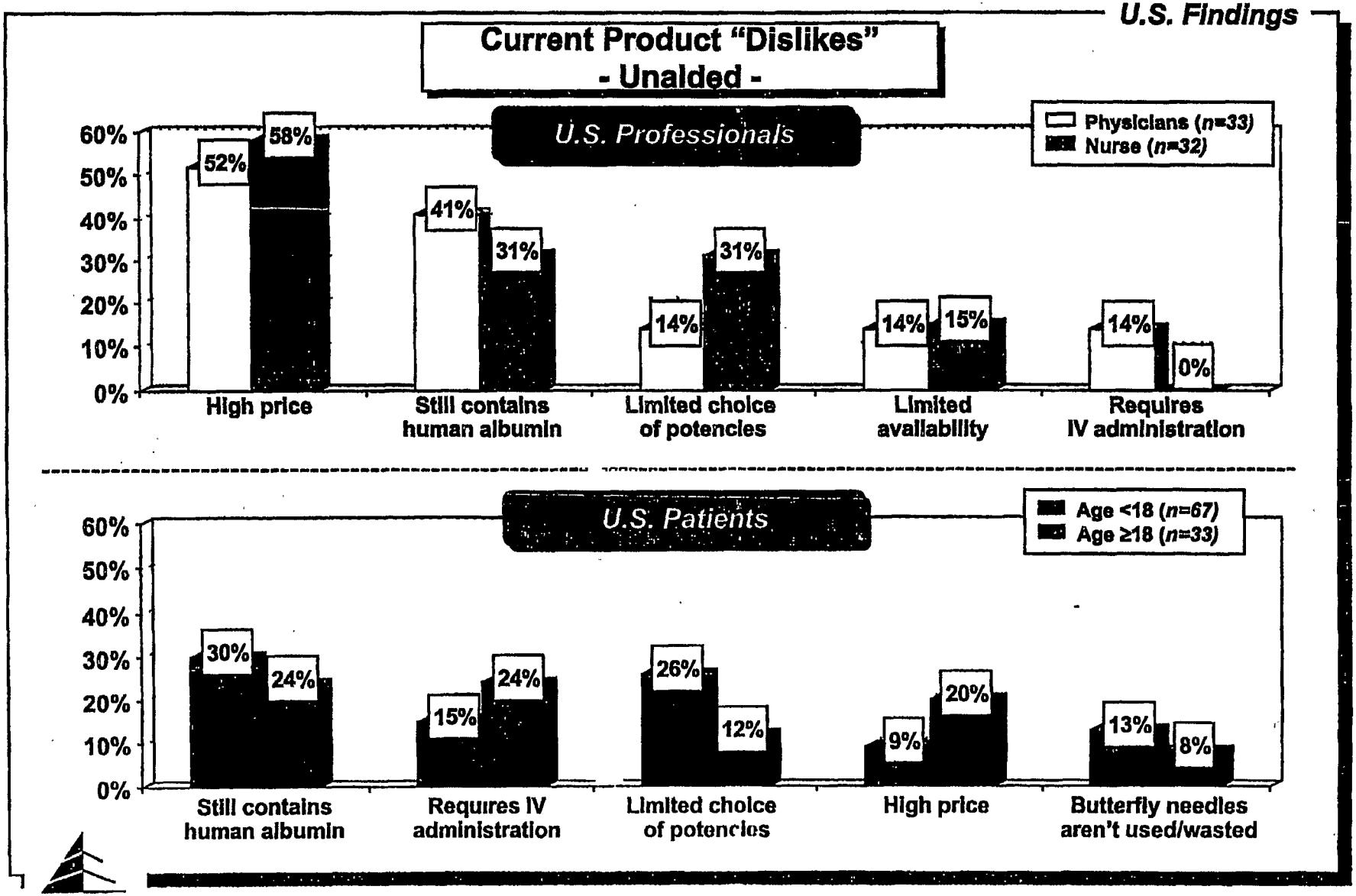


MARTEC

GH001117

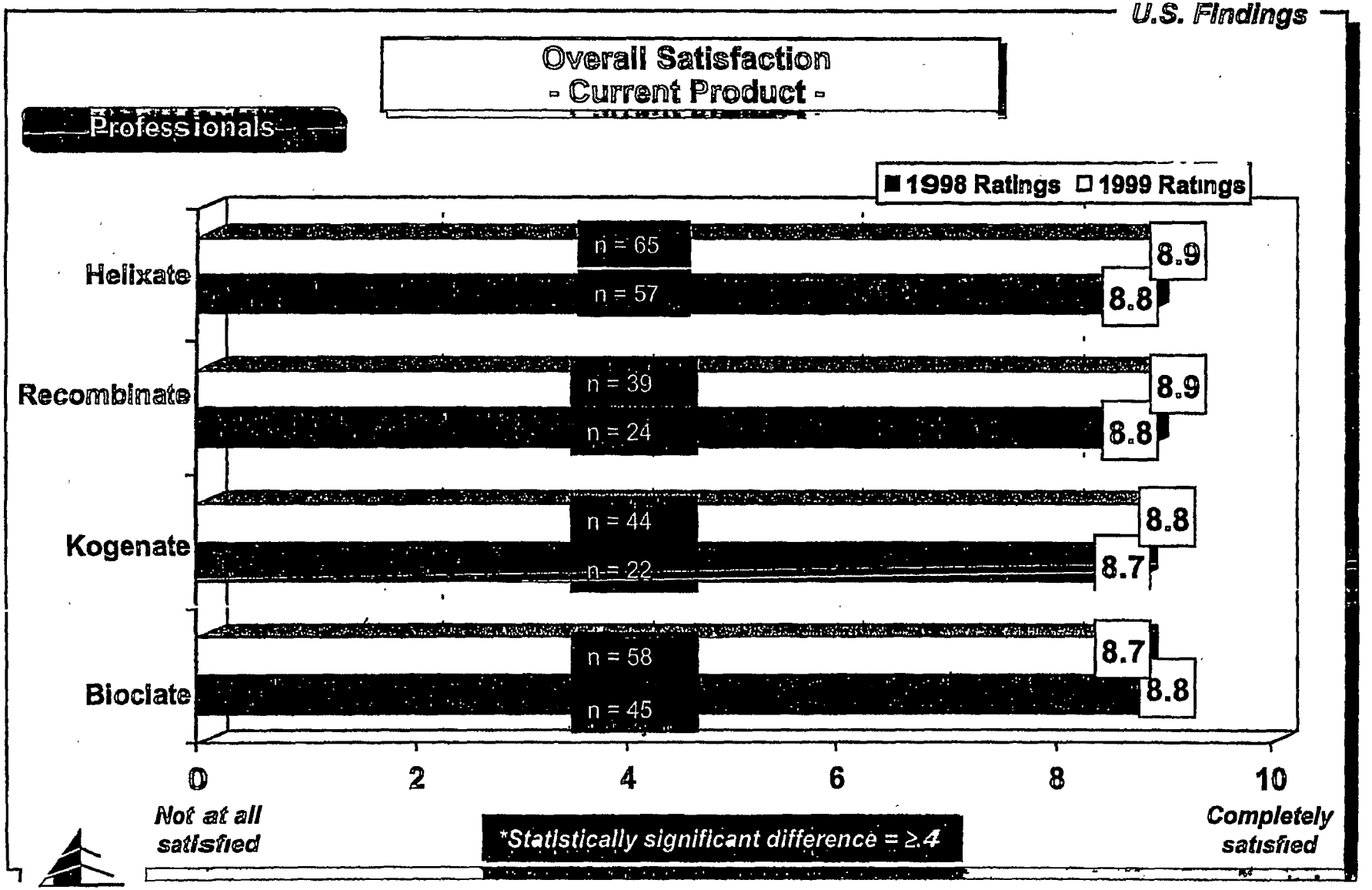
High price is the top "Dislike" among U.S. professionals. *Contains human albumin* is a leading "Dislike" among patients.

U.S. Findings



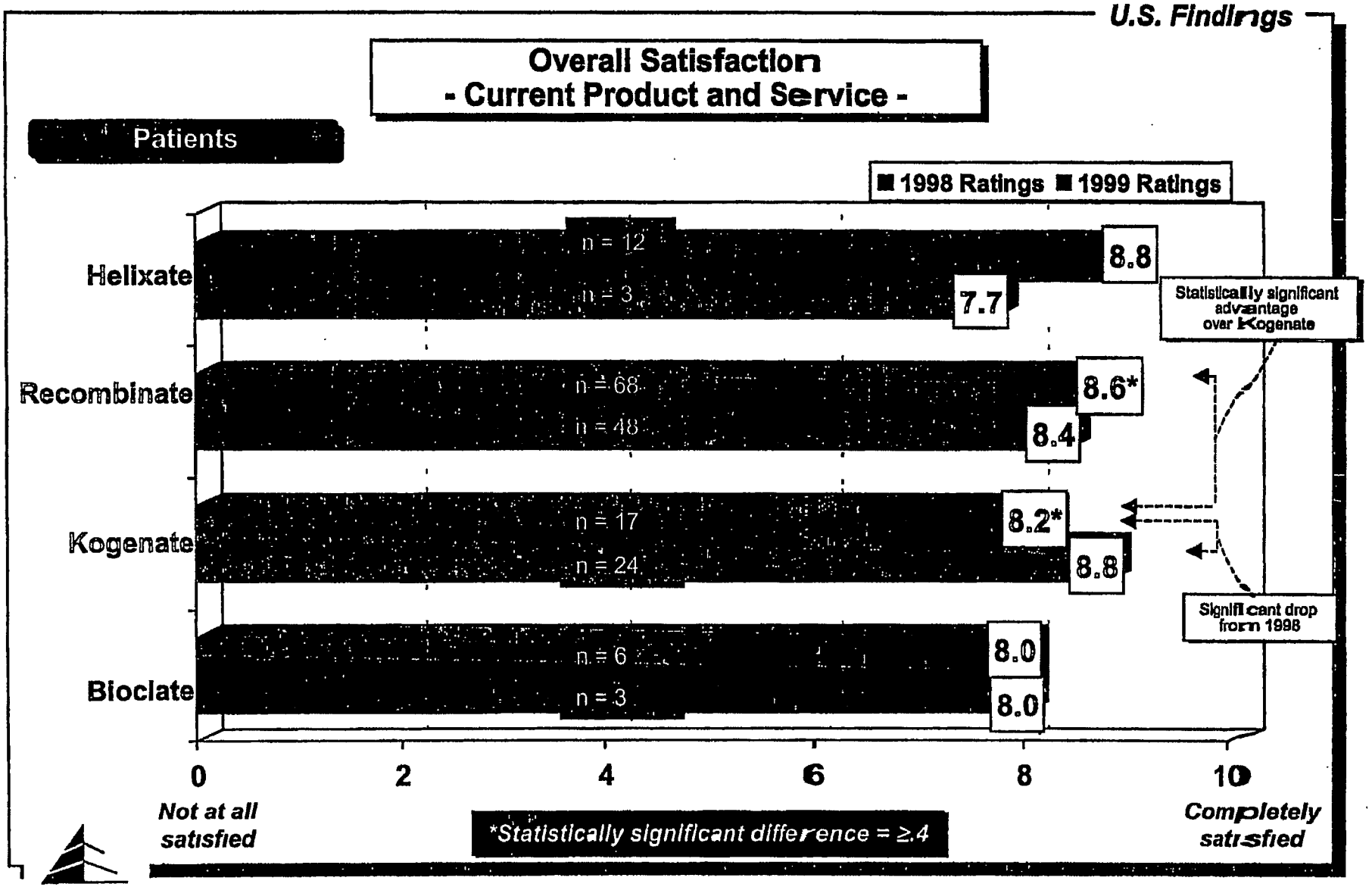
MARH C

U.S. professionals satisfaction has changed little since last year, with all products still being viewed as equal overall.



GH001119

Patients' satisfaction with Kogenate has dropped since 1998. Now Recombinate rates significantly ahead of Kogenate.



Improved Viral Safety **(both in general and as it relates to human proteins) is clearly the number one driver of switching.** ***Ease of use*** **and** ***efficacy*** **are leading secondary reasons to switch.**

U.S. Findings

Unaided Reasons for Past Switching
- U.S. Patients -

***Respondents could list multiple secondary reasons for switching*

	#1 Reason for Switching*	Secondary Reasons for Switching**
Less exposure to virus/disease	***30%***	***36%***
Less exposure to human proteins	***20%***	***19%***
Availability	14%	9%
Improved efficacy	9%	***15%***
Doctor/nurse recommendation	6%	13%
Easier to use/Convenience	4%	***17%***
Changed healthcare provider	3%	2%
Developed inhibitor	3%	2%
Developed viral infections	3%	--
Price	1%	6%
Others	7%	21%

n = 100

**No significant changes from 1998 data*

% of respondents mentioning

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U.S. patients rely on both their physician and their own research in their decision to switch products. Physician and nurse influence is greater among younger patients.

U.S. Findings

Past Switching Influencers
- U.S. Patients -

	Most Influential		Secondary Influencers	
	≤18	≥18	≤18	≥18
Doctor	***41%***	29%	23%	***36%***
Own research	16%	***32%***	***40%***	32%
Hemophilia Treatment Center*	17%	3%	0%	0%
Parents/family	12%	3%	10%	9%
Other patients	3%	12%	3%	18%
Nurse	3%	9%	***20%***	9%
Hemophilia Society Coordinator	3%	9%	3%	9%
Home Health Agency	2%	3%	0%	5%
Pharmacist**	2%	0%	3%	0%
	n = 67	*n = 33*	*n = 67*	*n = 33*

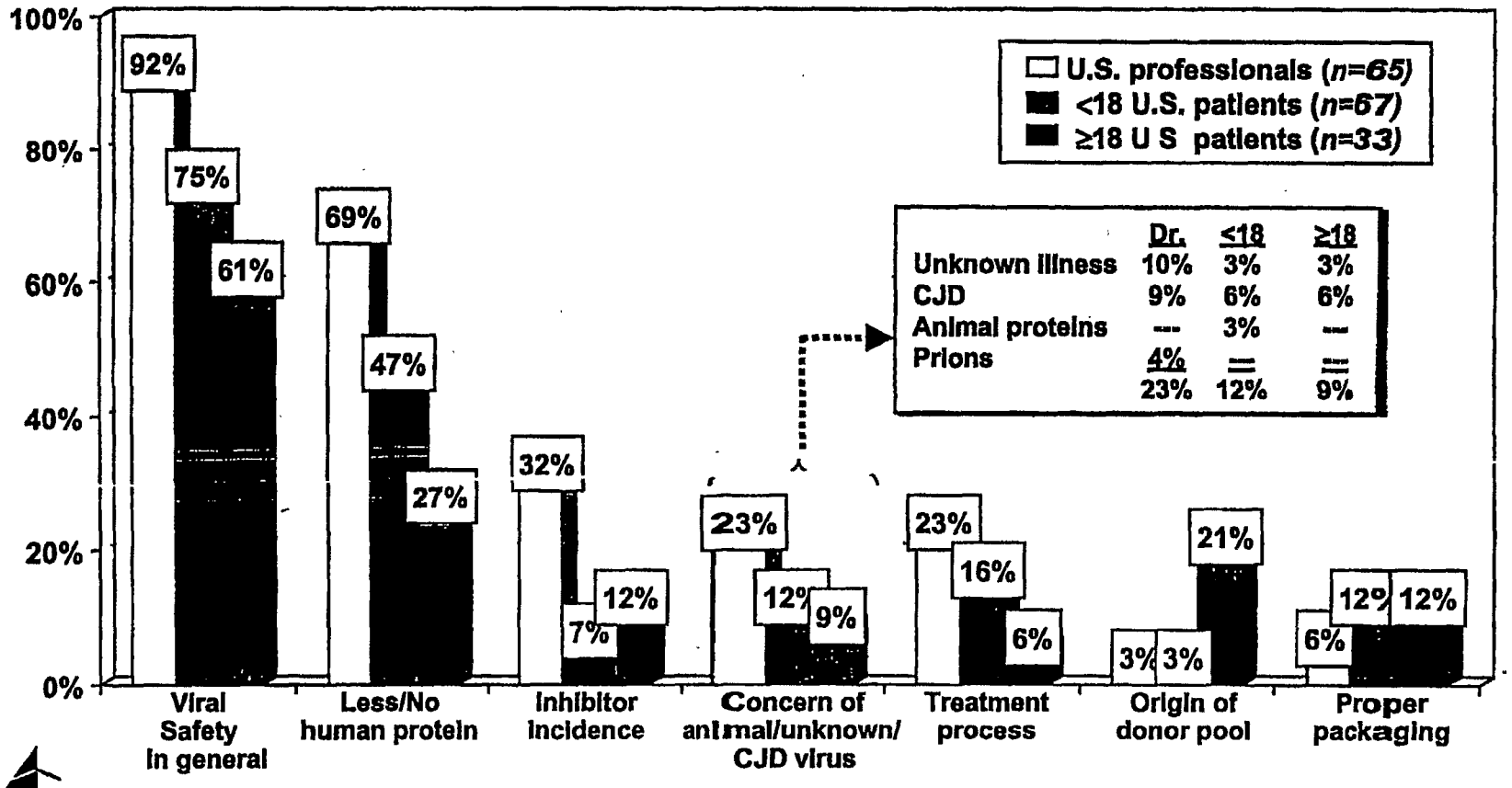
**Up from 10% in 1998*
***Down from 10% in 1998*

MARI·C

Viral Safety in general is clearly what most respondents think of when they think of product safety.

U.S. Findings

Unprompted Elements of Safety



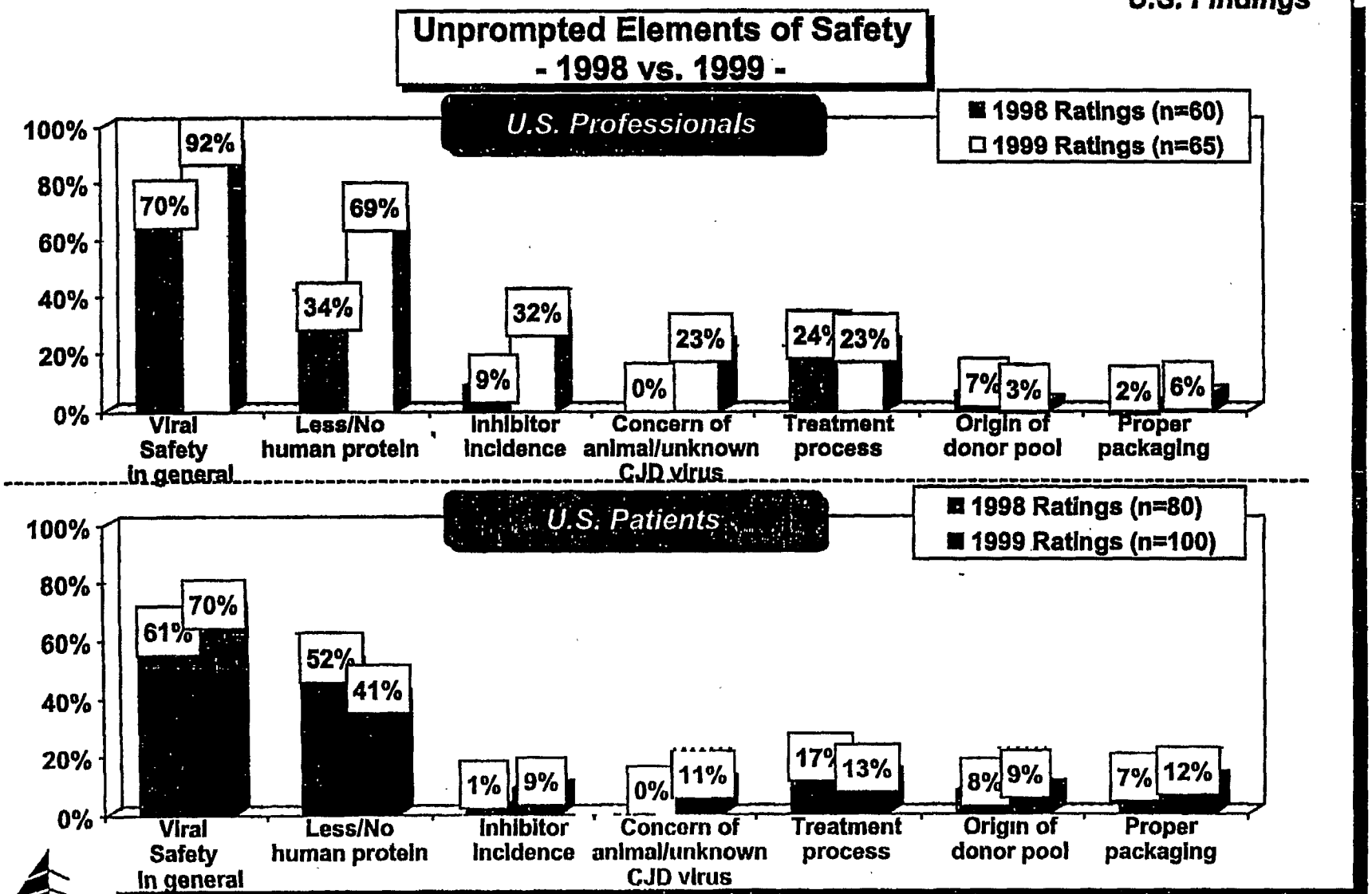
	Dr.	≤18	≥18
Unknown illness	10%	3%	3%
CJD	9%	6%	6%
Animal proteins	---	3%	---
Prions	4%	=	=
	23%	12%	9%

MARTEC

GH001123

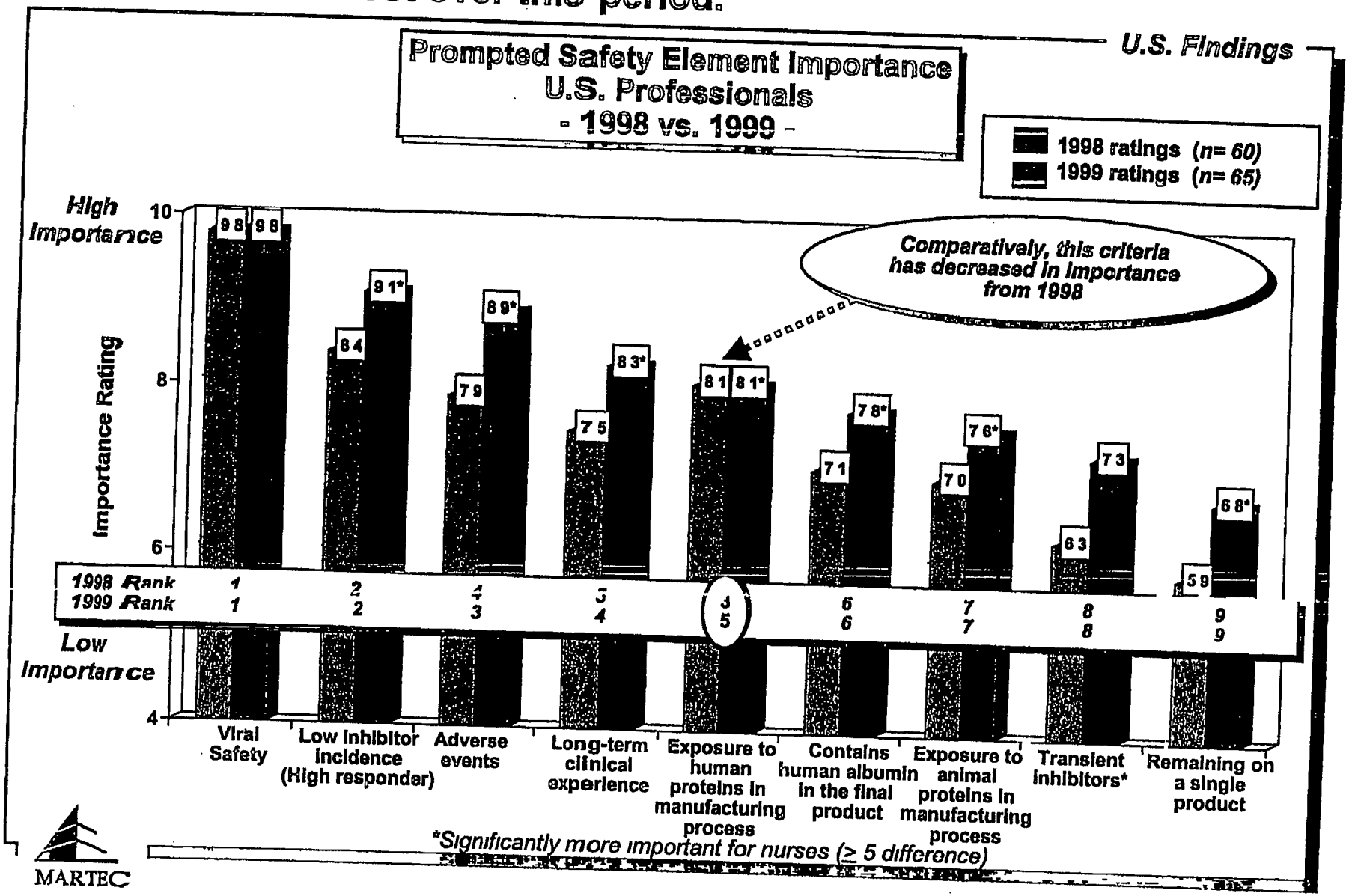
Viral Safety and Concern of CJD/animal/unknown viral diseases were mentioned unprompted by more respondents in the 1999 study.

U.S. Findings



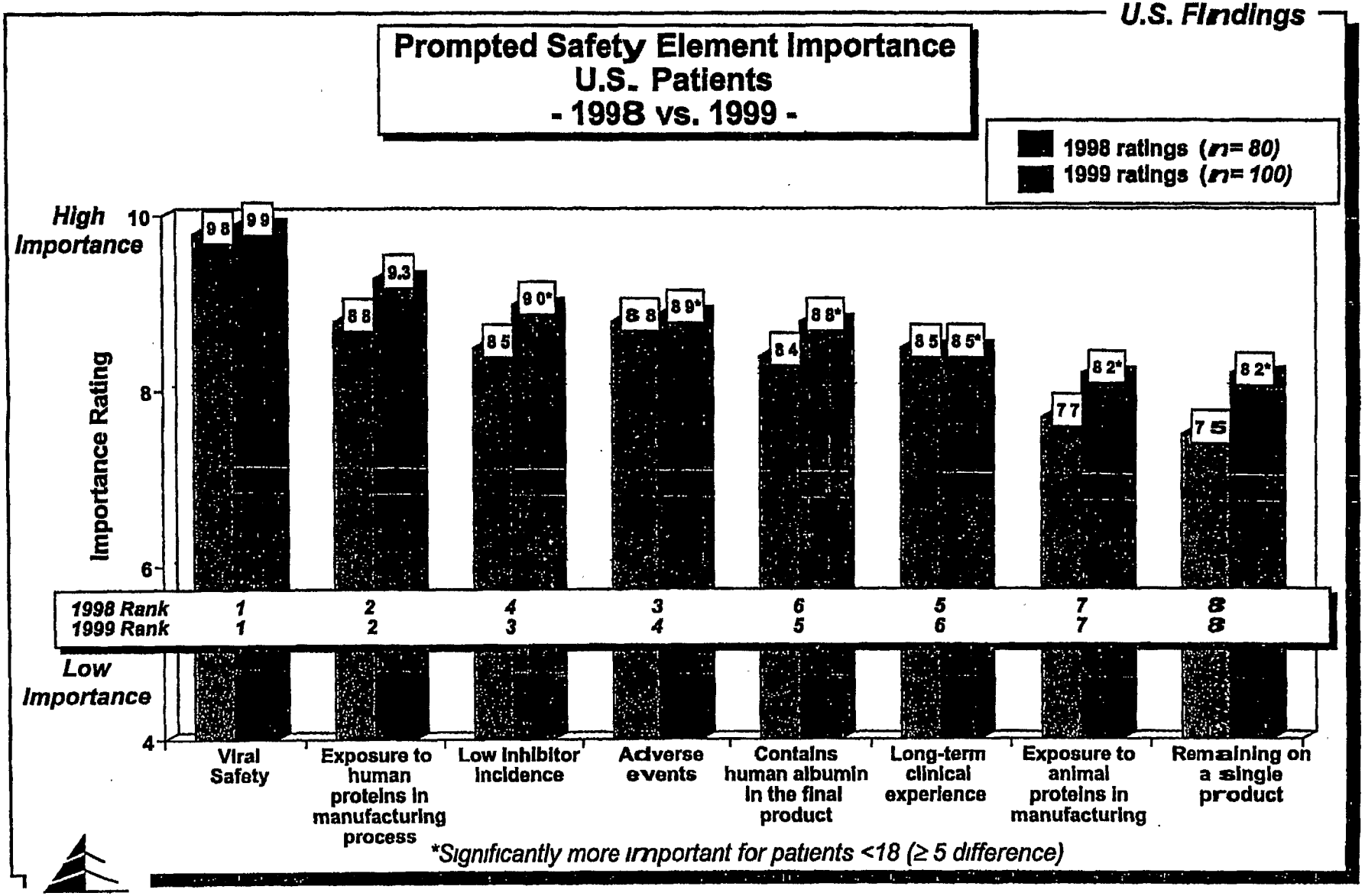
MARIL.C

Exposure to human proteins has dropped from 3rd in importance in 1998 to 5th in 1999. The importance of adverse events has increased the most over this period.



Importance ratings among U.S. patients have increased since 1998, but the comparative ranking of the elements is similar.

U.S. Findings



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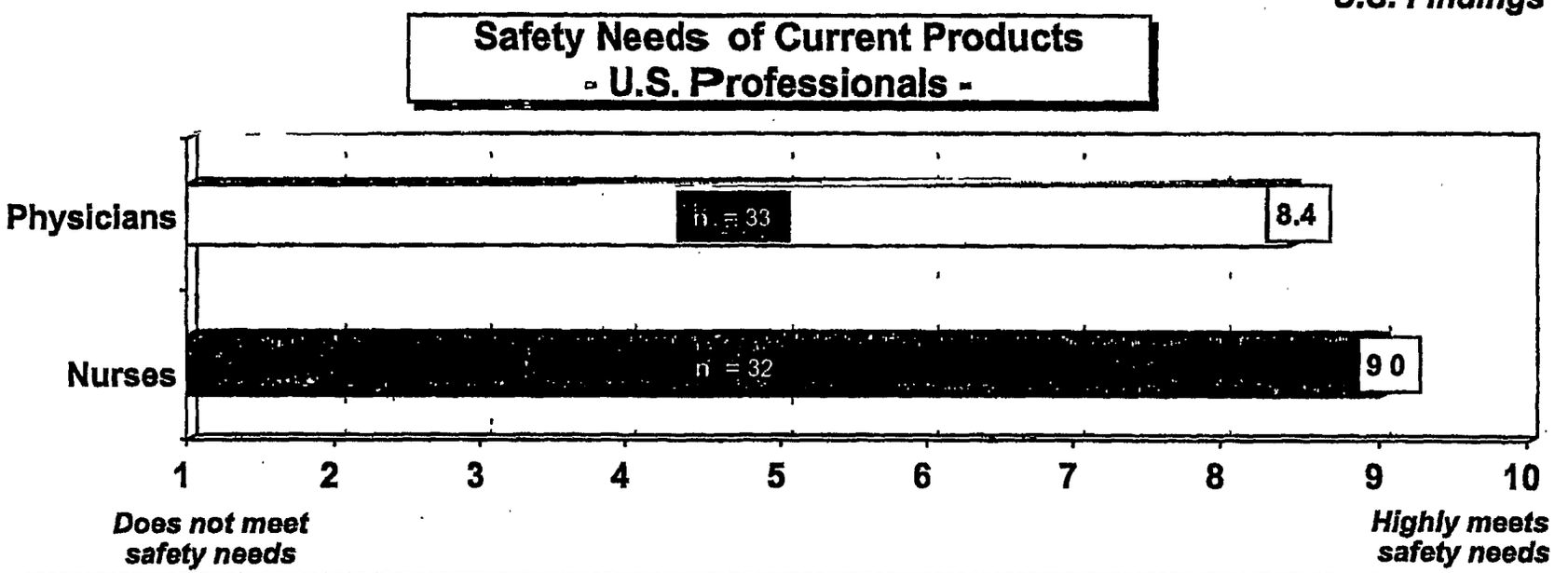
U.S. physicians rate the safety of recombinant products lower than nurses. However, physicians typically give lower ratings on all issues, so this difference is likely not significant.

U.S. Findings



Comments

"There has been no infection from recombinants, but the theoretical risk exists due to human albumin being used as a stabilizer" - U S Physician

"I did not rate it a 10 because of the use of human albumin and inhibitor issues" - U S Physician

"With human albumin in the product, you can't tell a parent that the product is 100% safe" - U S Nurse

"The safety record is excellent, but the risk of infection still exists" - U S Nurse

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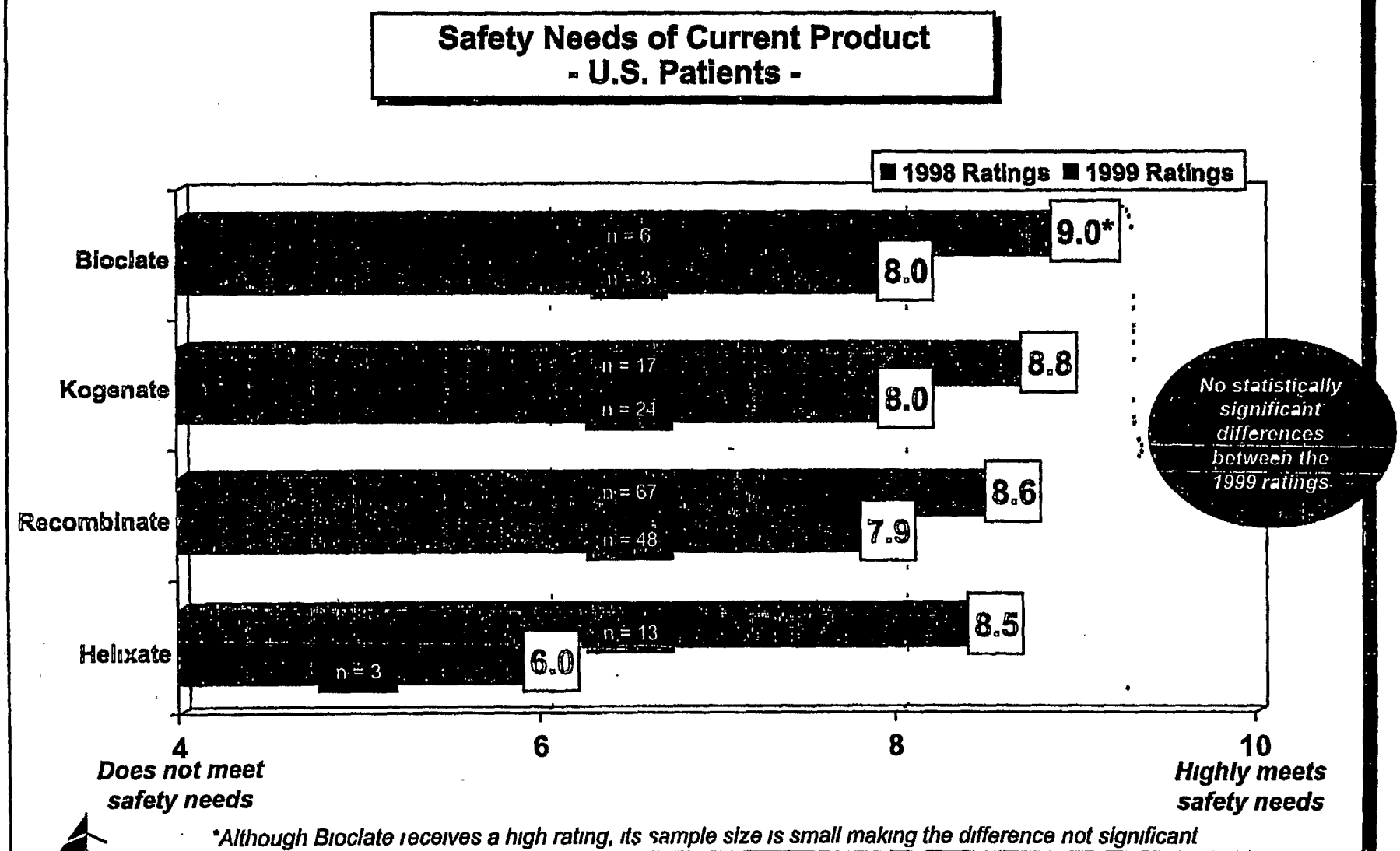
GH001127

As with professionals, patients' safety ratings are high, but not perfect. However, safety ratings are up for each product over last year.

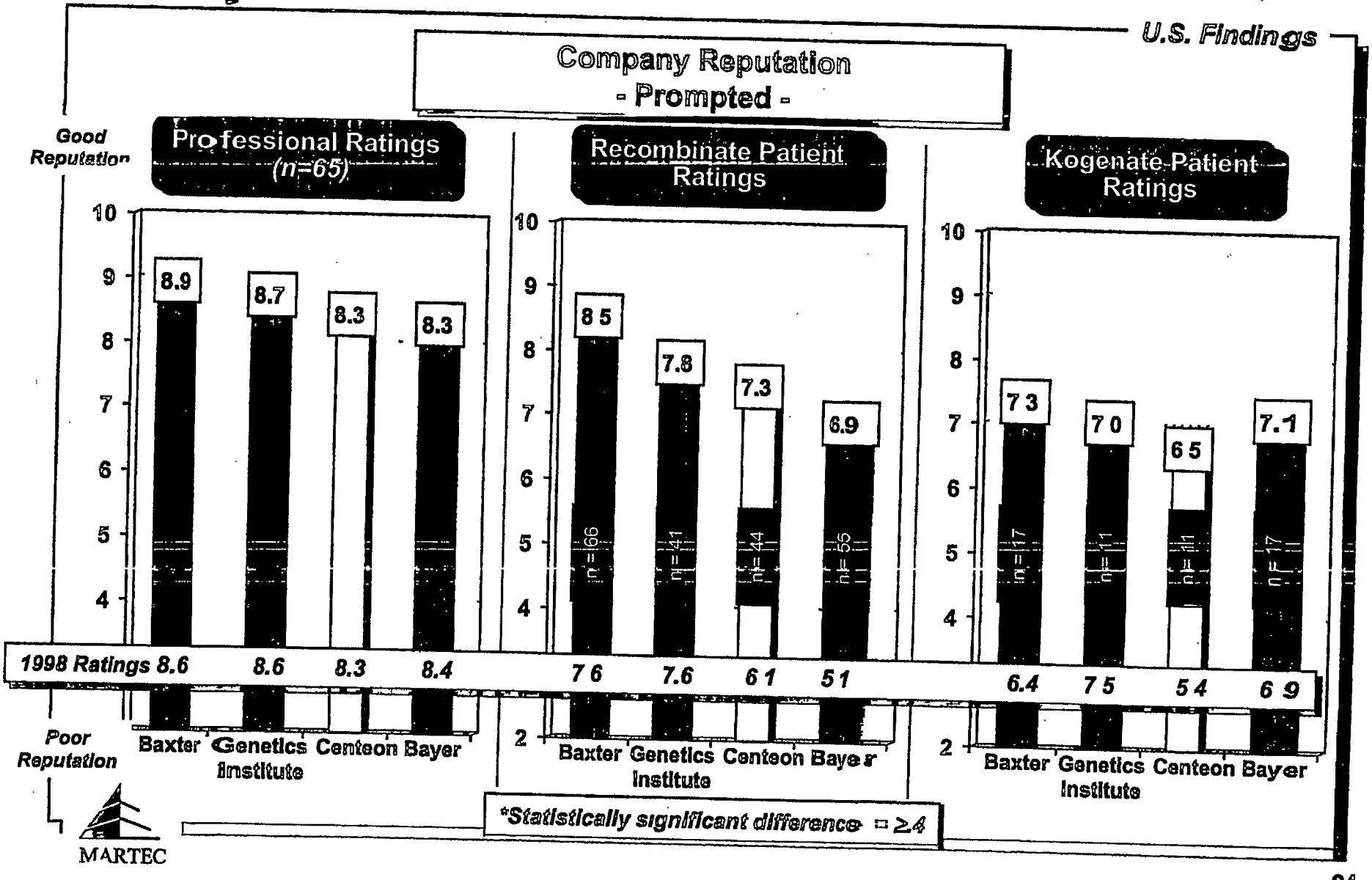
U.S. Findings



*Although Bioclate receives a high rating, its sample size is small making the difference not significant

MARTI C

Recombinate users rate Baxter the highest in terms of reputation. Professionals rate Baxter and Genetic Institute higher than Centeon and Bayer.



GH001129

Older patients' opinions are still strongly influenced by the contamination problems of the 1980s.

U.S. Findings

Company Reputation Comments

"I saw a report stating the HIV problems were due greatly to Bayer Baxter gets higher ratings because they checked who they got their supply from." - U.S , ≥18 Recombinate User

"I wasn't happy with Baxter, Bayer and Centeon's role in contaminating so many people, nor how they did not take responsibility. I wish I did not have to get product from them " - U.S , ≥18 Helixate User

"Baxter, Bayer and Centeon were all responsible for transmitting HIV and Hep C in the past GI is new and seems to be handling the community better." - U S , ≥18 Kogenate User

"Bayer and Centeon have had a lot of problems with their plants and manufacturing GI is on the cutting edge of new technology and having good results I'm happy with Baxter." - U S , <18 Recombinate User

"Baxter has good R&D Bayer has problems with availability Centeon took a hit in prestige when it closed its plant for quality control reasons GI has problems with incorrect dosing recommendations " - U.S Physician

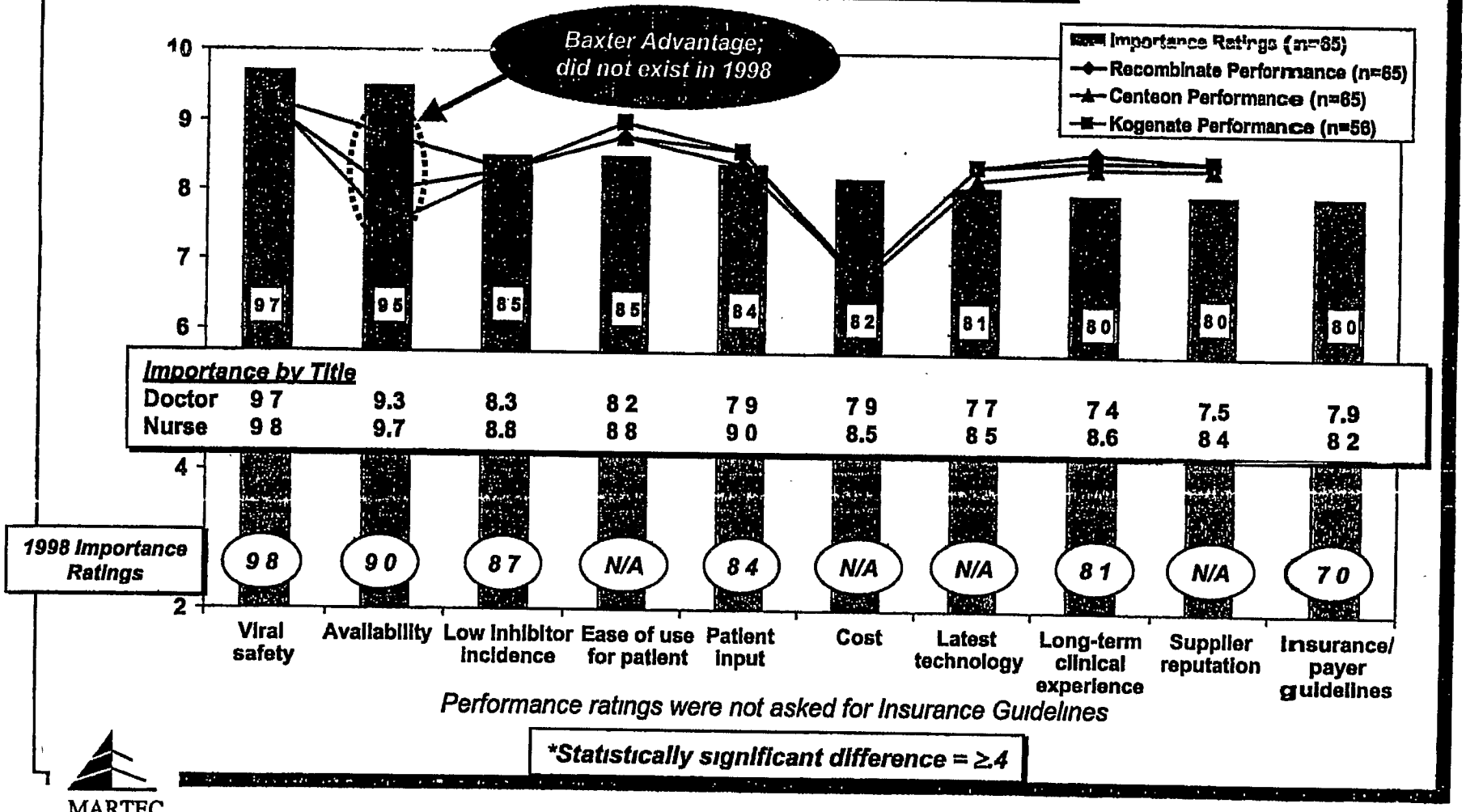
"In the last year Baxter had no shut-downs or recalls Centeon and Bayer have had recent shortages We had patients get sick on GI's Benefix " U S Nurse

MARILC

Outside of Baxter's lead in *Product Availability*, professionals view all U.S. suppliers as equal performers on all other key switching criteria.

U.S. Findings

U.S. Professional Key Switching Criteria - Importance and Performance -

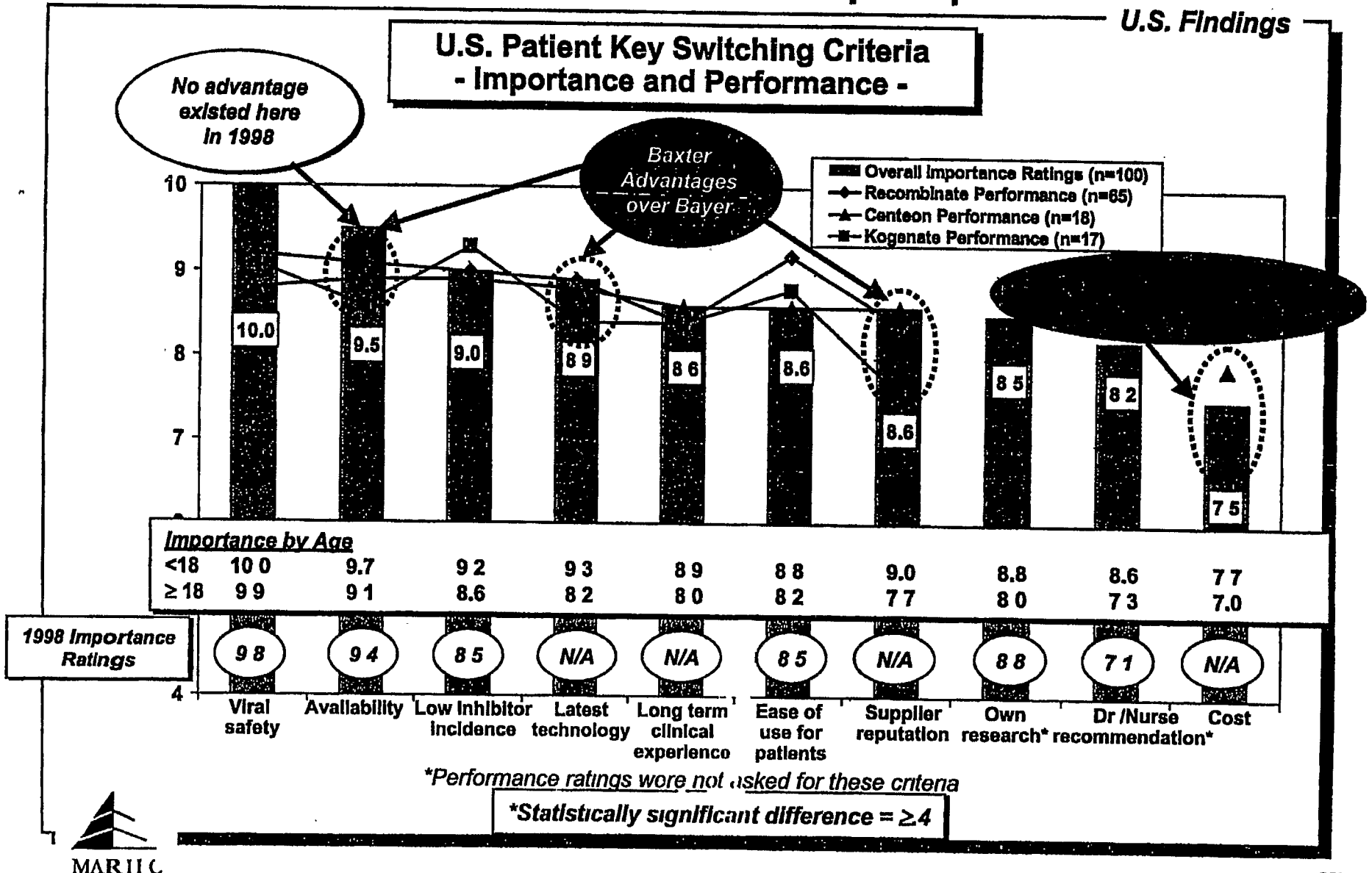


MARTEC

GH001131

Recombinate users rate Baxter significantly higher (≥ .4) than Kogenate users rate Bayer in *Availability, Latest Technology* and *Supplier Reputation*. Centeon leads in *Cost* perception.

U.S. Findings

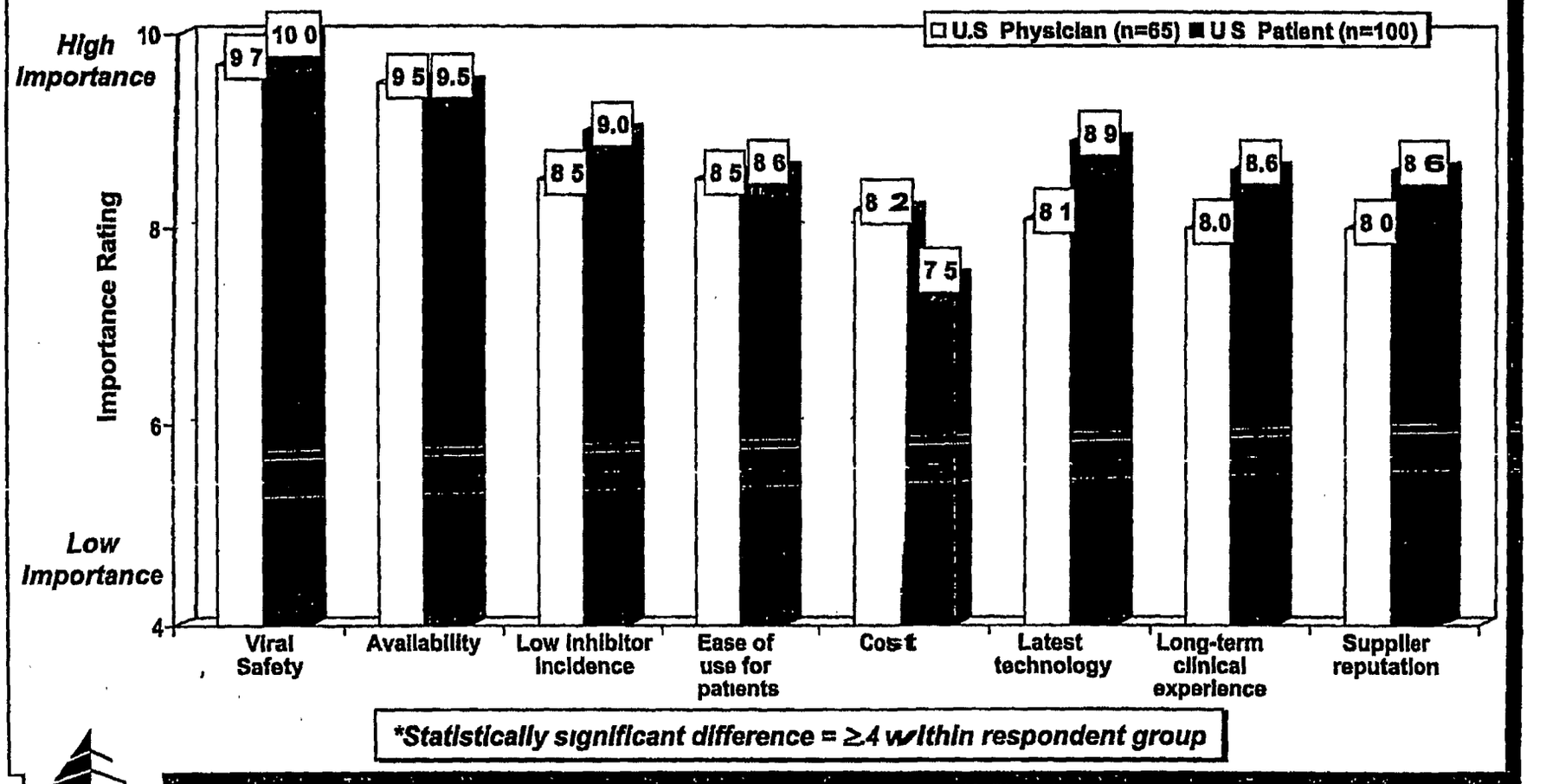


MARKET

Viral Safety, availability **and** ***low inhibitor incidence*** **rank as the top three criteria for U.S. physicians and patients. Beyond these criteria, opinions differ about what is important.**

U.S. Findings

Key Switching Criteria Importance
- U.S. Physician vs. U.S. Patient -



*Statistically significant difference = ≥4 within respondent group

MARTEC

No *other* criteria were mentioned by more than 10% of responders. However, the *availability of educational information* was most often mentioned by three of the four segments.

U.S. Findings

Other Selection Criteria - Not from List Provided -

U.S. Professionals

	Physicians	Nurses
Education to patients	9%	9%
Range of potencies	6%	6%
Efficacy	3%	3%
Adverse events	3%	3%
Syringe system/application method	0%	6%
	n = 33	*n = 32*

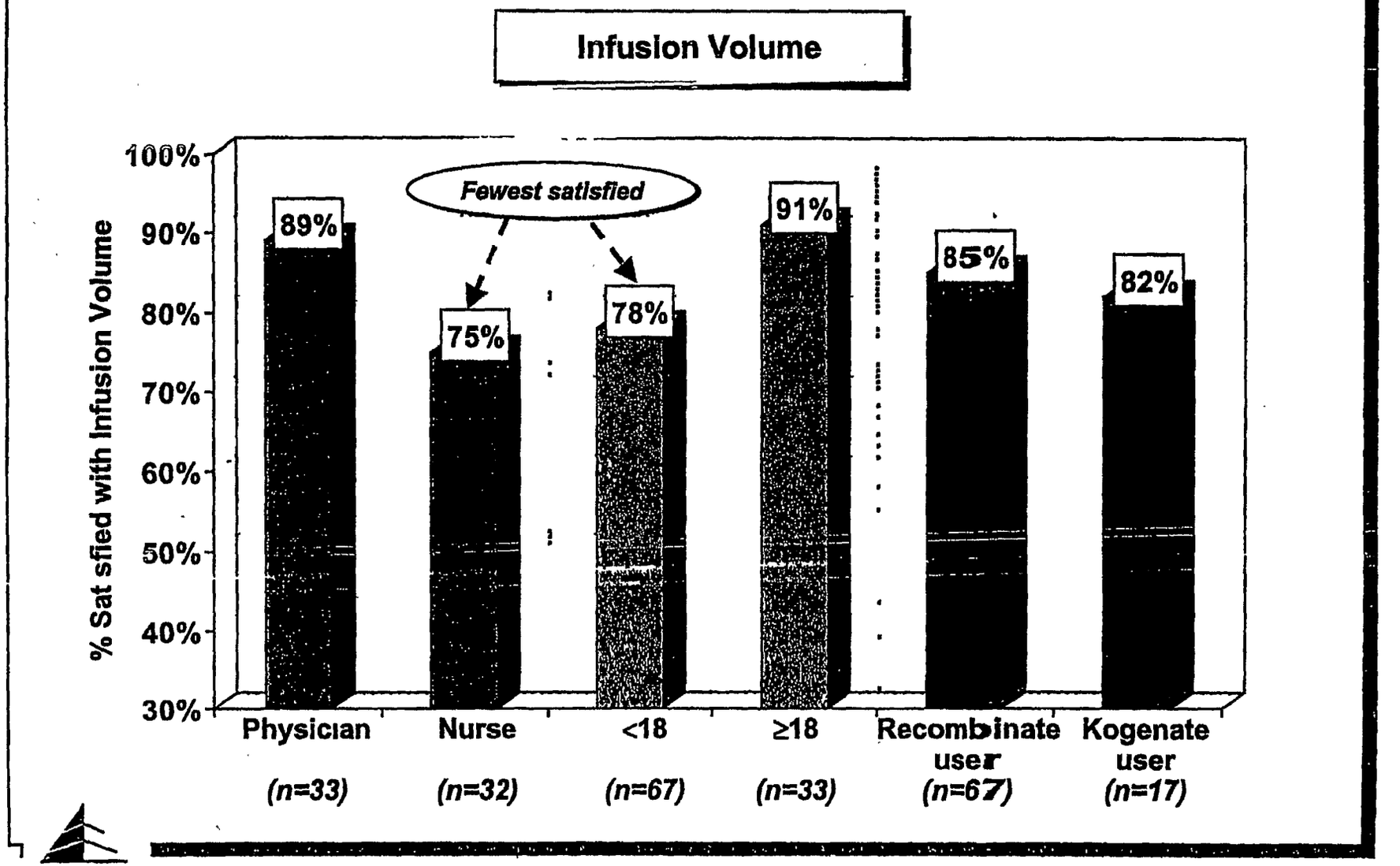
U.S. Patients

	≤18	≥18
Education to patients	9%	0%
Syringe system/application method	6%	3%
Ease of mixing	4%	6%
Efficacy	4%	0%
Covered by insurance	4%	0%
Infusion volume	3%	3%
	n = 67	*n = 33*

MARTEC

Fewer younger, and hence smaller, patients are satisfied with the *Infusion Volumes* of current products.

U.S. Findings



MARTEC

GH001135

While most respondents are satisfied with the current infusion volumes, there is a need for a *minimum volume size of 5 milliliters.*

U.S. Findings

Infusion Volume Improvement Comments

Most complaints related to too high of volumes...

U.S. Professionals

"Ten ml is fine for most patients, but 5 ml is needed for pediatric patients"

"Don't go less than 5 ml or you will leave too much product in the tubing and under dose "

"I believe 0 8 ml is typically left in the tubing Therefore, with a 2 5 ml vial, one-third of the product does not get into the patient "

U.S. Patients

"Ten mils is too much to put into my child. Going with 5 ml is much more tolerable."

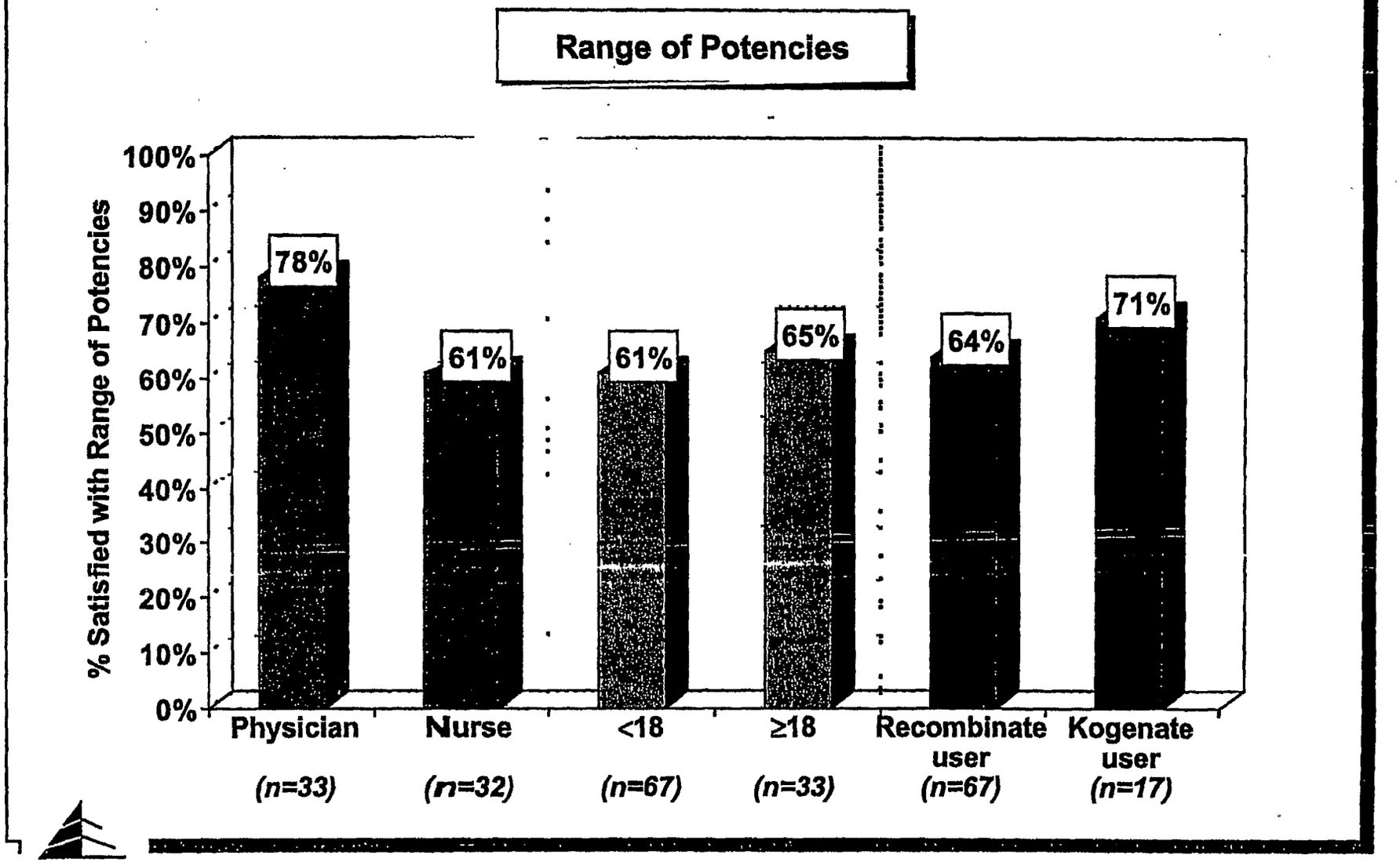
"Less volume would be desired "

"The infusion volume of recombinant products is a vast improvement over plasma-derived products."

MARTEC

Within all segments, fewer respondents are satisfied with the *Range of Potencies* than with the *Infusion Volumes* of current products.

U.S. Findings



MARTEC

GH001137

Respondents express a need for a *greater variety of potencies* to better match their dosing needs.

U.S. Findings

Range of Potencies Improvement Comments

U.S. Professionals

Need more variety of potencies (150 IU, 750 IU)	19%
Need lower potencies (50 IU)	18%
Need higher potencies (1500 IU + up)	4%
Need better availability of current ranges	1%
	n = 65

"The range is fine, but there never seems to be enough of the smaller unit size (50 & 100) vials available"

U.S. Patients

	≤18	≥18
Need more variety of potencies (150 IU, 750 IU)	30%	24%
Need higher potencies (1500 IU + up)	14%	26%
Need lower potencies (50 IU)	7%	3%
Need better availability of current ranges	1%	3%
	n = 67	*n = 33*

"I need a greater range of choices so I don't have to waste so much Especially, since it is so expensive"

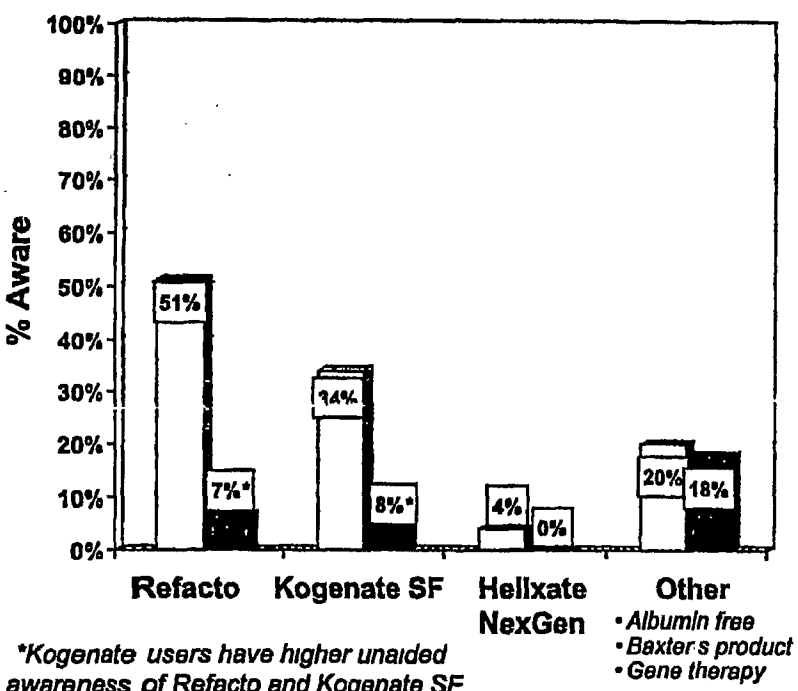
MARTEC

Refacto had the highest level of awareness, both unaided and aided.

U.S. Findings

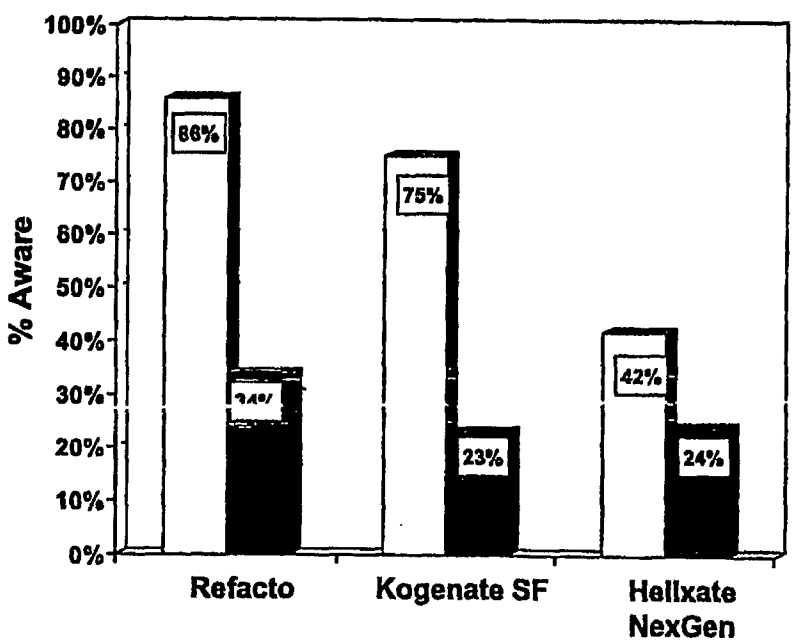
New Product Awareness
- U.S. Professionals and U.S. Patients -

Unaided



*Kogenate users have higher unaided awareness of Refacto and Kogenate SF

Aided

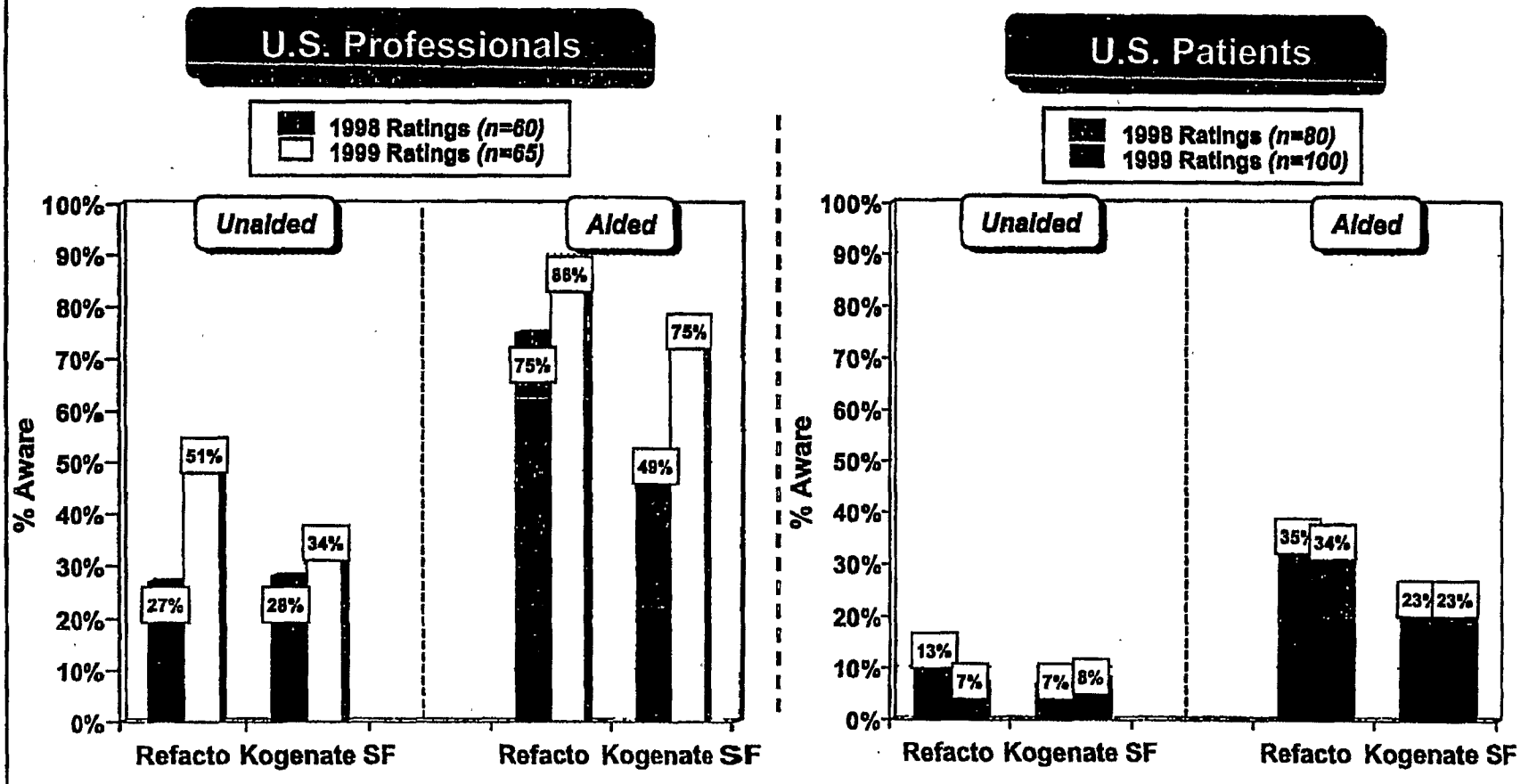


MARTEC

Awareness among U.S. professionals of both Refacto and Kogenate SF has increased from 1998. Awareness has remained constant among U.S. patients.

U.S. Findings

New Product Awareness
- 1998 vs. 1999 -



MARTI (

A large number of U.S. professionals believe that the next generation products will be Albumin Free.

U.S. Findings

Current Knowledge of New Products - U.S. Professionals -

Kogenate SF

- ***Albumin free*** ***34%****
- Less albumin 29%*
- No answer 27%
- Heard of, but nothing specific 14%
- Sugar as stabilizer 16%
- In trials/coming out soon 14%
- Added viral inactivation 9%

Refacto

- ***Albumin free*** ***37%****
- B-domain deleted 30%*
- Less albumin 17%
- In trials/coming out soon 17%
- No answer 17%
- Heard of, but nothing specific 11%
- Different assay required 10%

Helixate NexGen

- No answer 57%
- ***Albumin free*** ***13%***
- Heard of, but nothing specific 11%
- Same as Kogenate SF 10%
- Less albumin 7%
- In trials/coming out soon 7%
- Sugar as a stabilizer 7%

*Significantly higher %'s than in 1998

% of respondents mentioning

MARTEC

Typically, U.S. patients knew little about the new products coming to market.

U.S. Findings

Current Knowledge of New Products - U.S. Patients* -

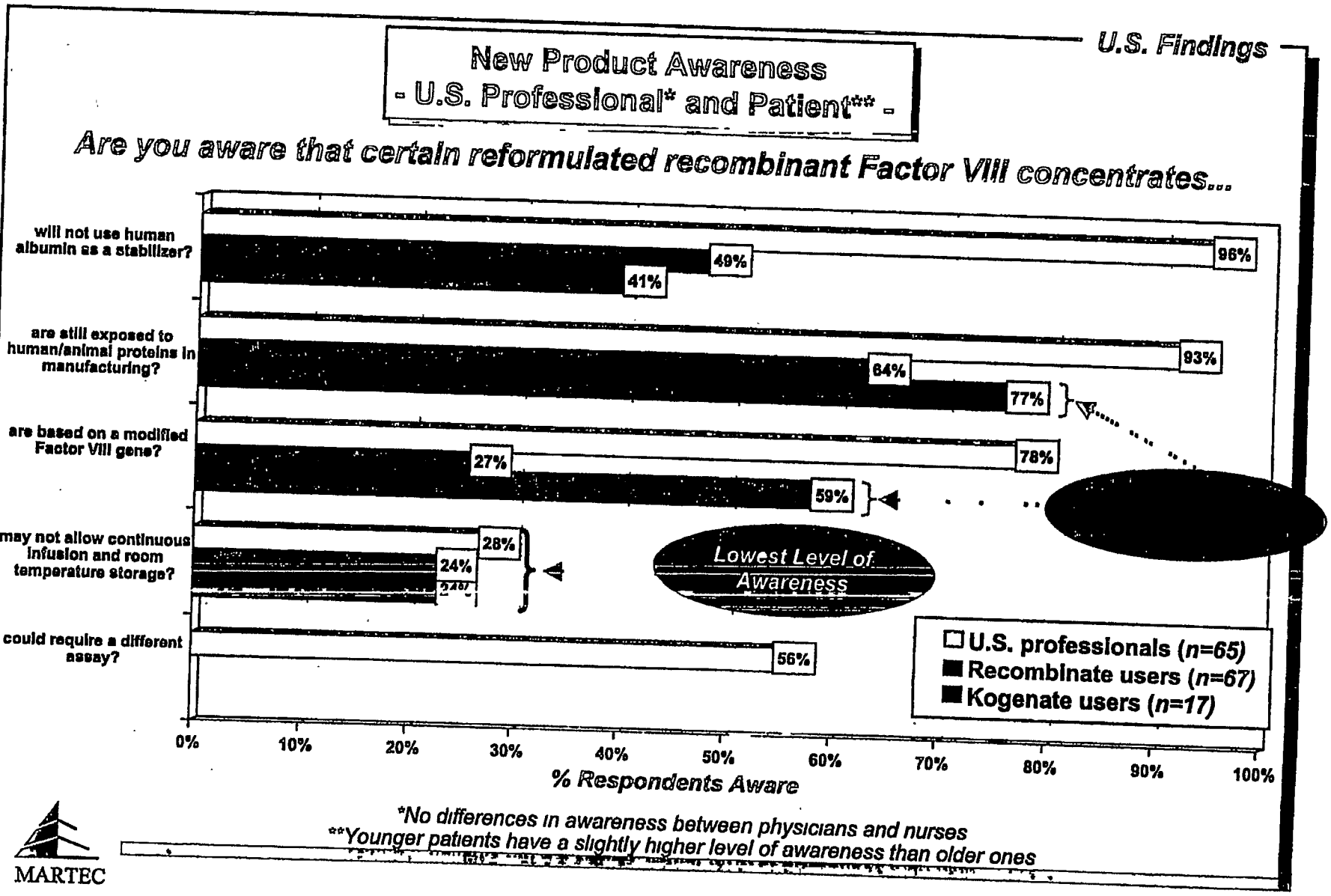
Kogenate SF		Refacto		Helixate NexGen	
• ***No answer***	***88%***	• ***No answer***	***68%***	• ***No answer***	***89%***
• Heard of, but nothing specific	10%	• Heard of, but nothing specific	15%	• Heard of, but nothing specific	12%
• Albumin free	6%	• Albumin free	9%	• Albumin free	3%
• Less albumin	5%	• In trials/coming out soon	4%	• Same as Kogenate SF	2%
• In trials/coming out soon	5%	• Not FDA approved yet	3%	• Less albumin	1%
• Synthetic product	4%	• Less albumin	2%		
		• B-domain deleted	2%		
		• Different assay required	1%		

**No significant changes from 1998*

% of respondents mentioning

MARITC

Few respondents were aware of ... may not allow continuous infusion and room temperature storage.

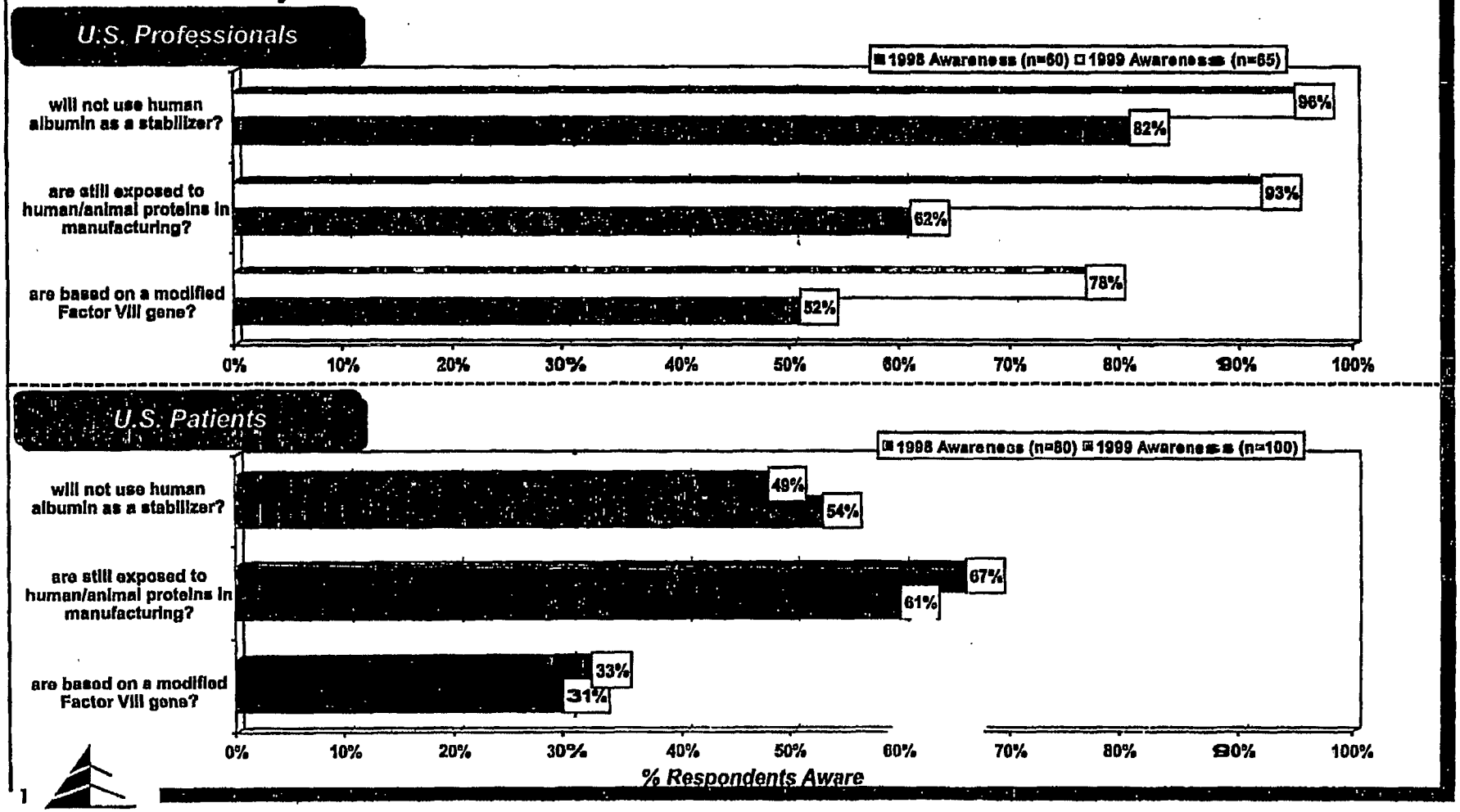


Professionals' awareness of these issues has increased significantly from last year, while patients' awareness is basically unchanged.

U.S. Findings

New Product Awareness - 1998 vs. 1999 -

Are you aware that certain reformulated recombinant Factor VIII concentrates...



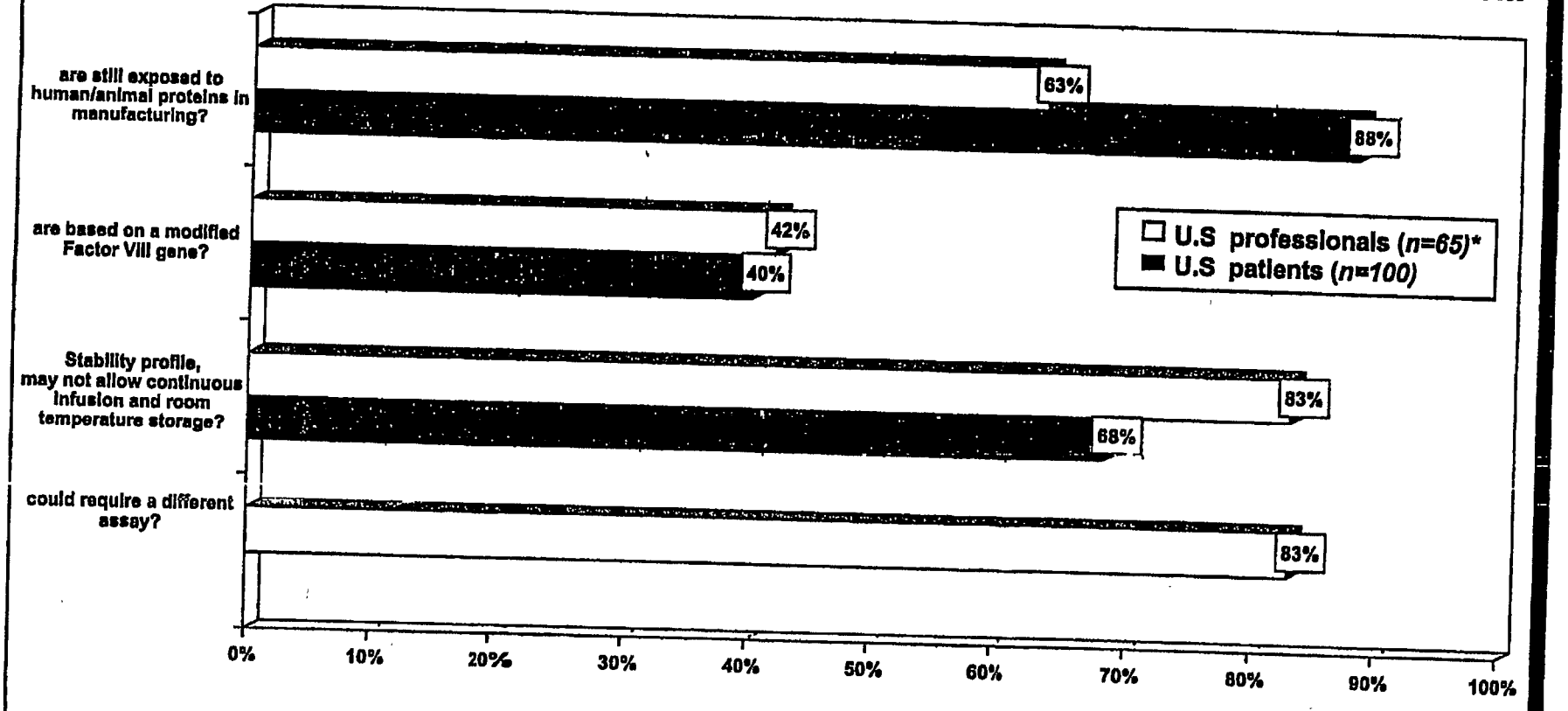
MARIT(

U.S. patients are most concerned about *exposure to human/animal proteins*. U.S. professionals are most concerned about *stability profile* and *requiring different assays*.

U.S. Findings

New Product Concerns

Is it a concern to you that certain reformulated recombinant Factor VIII concentrates...



*Physicians and nurses display a similar level of concern for each issue

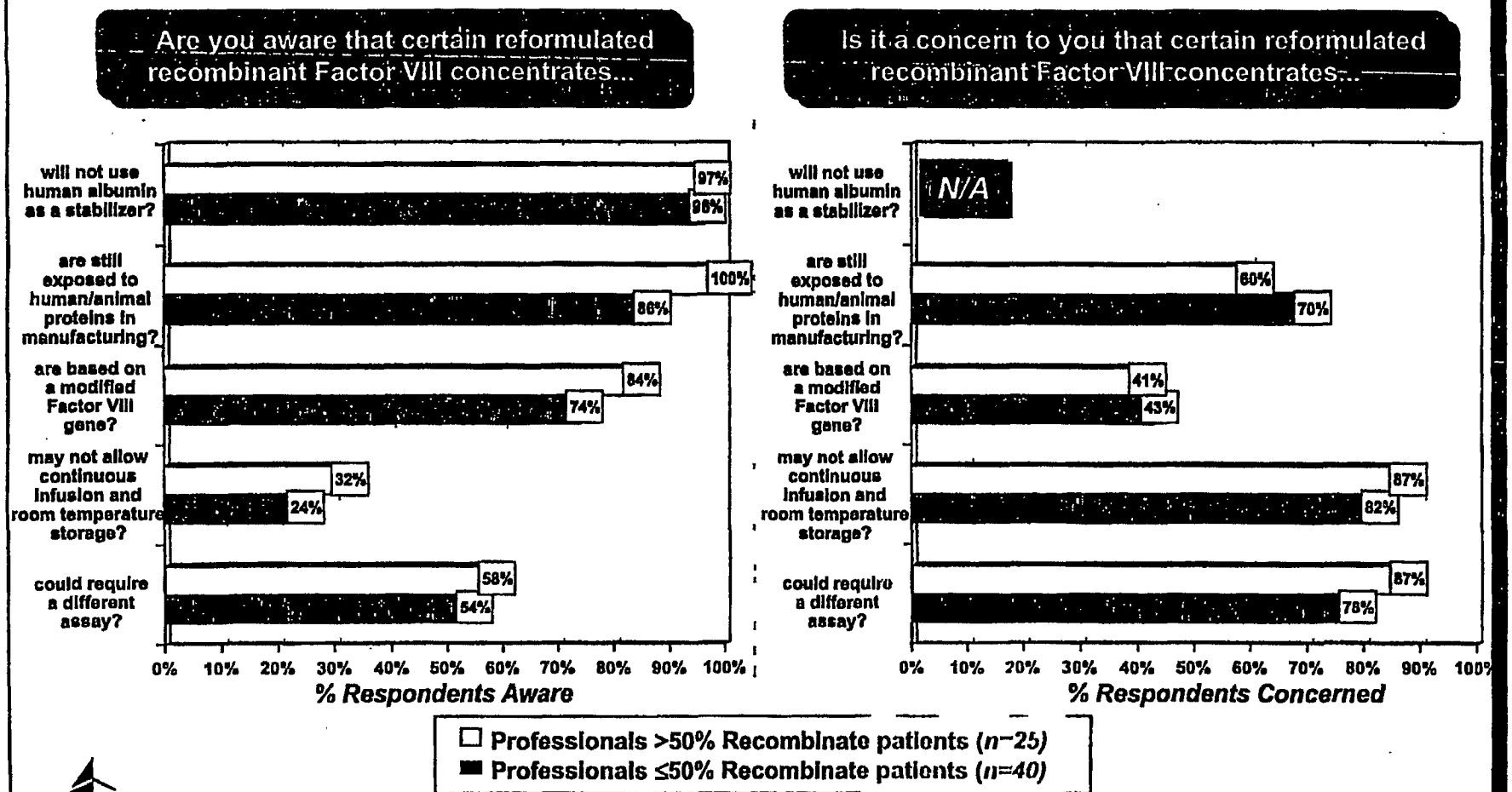
MARTEC

GH001145

"Baxter Friendly" professionals awareness of these issues is slightly higher than other professionals'.

U.S. Findings

New Product Awareness and Concern - Baxter Friendly Physicians vs. Others -



MARI·C

Comments support U.S. respondents' concerns...

U.S. Findings

New Product Concerns

Comments/Quotes

"Not stabilizing with albumin will lessen the exposure to human proteins and make it a safer product.'
- U.S Physician

"We don't know for sure if we are transmitting human or animal viral diseases Slow viruses may not show up for years. So, to be safe it is better without this exposure " - U S Physician

"Anytime there is something human or animal in the product there is a concern we can catch a virus "
- U S., <18 Recombinate User

"Removing the B-domain has not effected efficacy. We are waiting for the test results on inhibitor formation "
- U.S Physician

"I would hate to have to refrigerate I travel a lot and enjoy my freedom This would be a step backwards "
- U S , ≥18 Kogenate User

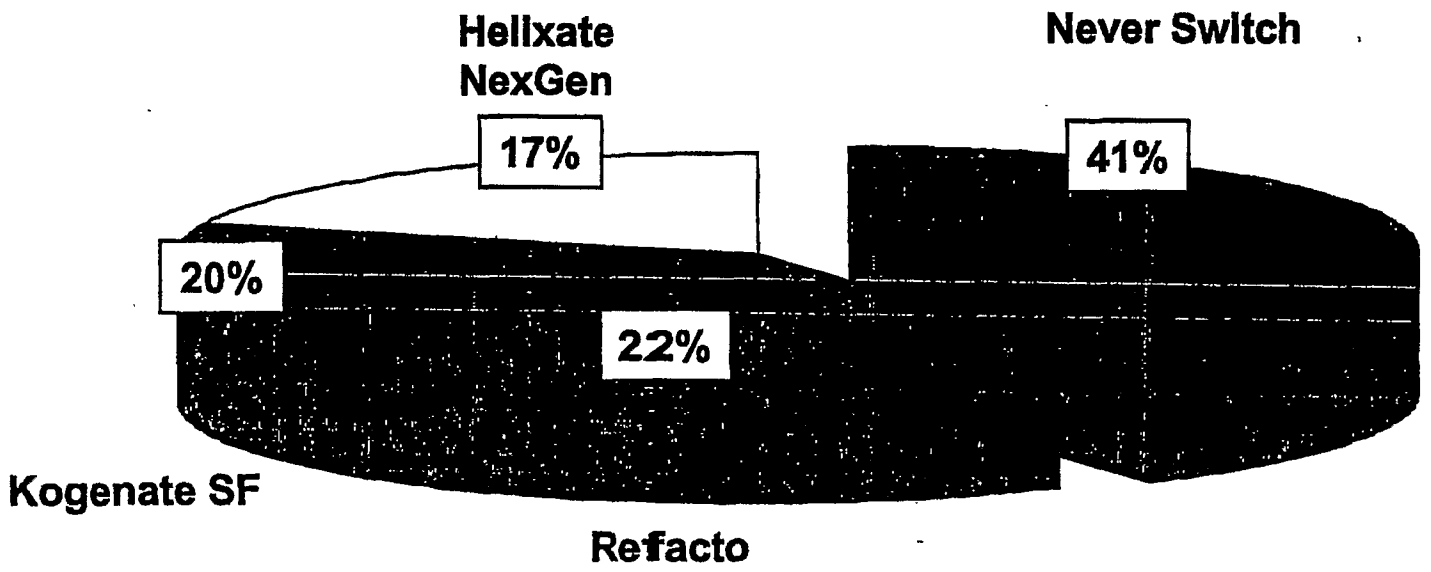
"Continuous infusion is a very important therapy, especially for inhibitor patients Having it for an option is important "
- U S Physician

"The different assays would cause problems The labs will be confused because they won't know what brand is used Plus it would be very costly to switch reagents and equipment "
- U S Physician

C , average, U.S. professionals (pect 41% of their patients <u>not</u> p <u>switch</u> to a reformulated product. No product is significantly more likely to be the product of choice for those that do switch.

U.S. Findings

What % of Patients Will Switch to Each Product?
- U.S. Professionals -

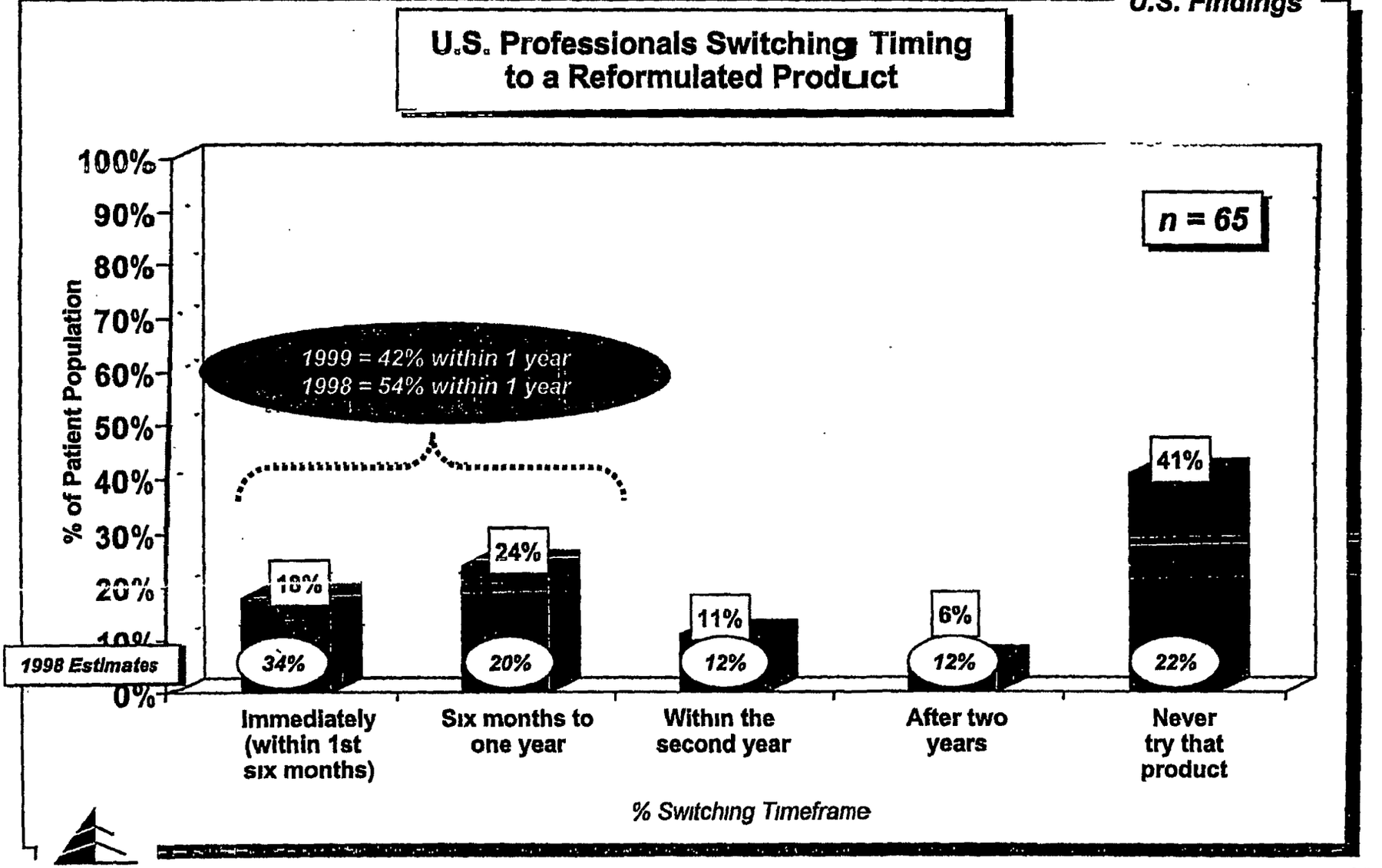


n = 65

MARTIC

U.S. professionals expect fewer patients to switch to a reformulated product now (59%) than they did last year (78%). Fewer are also expected to switch immediately.

U.S. Findings



MARTEC

GH0O1149

A variety of factors will influence switching timing.

U.S. Professionals Switching Timing
- Explanations -

Comments/Quotes

"The reformulated products are not a huge advancement They'll be more expensive, plus people are loyal to their current products Only those looking for and willing to pay for the latest and greatest technology will switch immediately " - U S. Physician

"We wouldn't switch patients until we see them in the clinic. I can't see 150 patients immediately so it won't be a wholesale change over " - U.S Physician

"People are very satisfied with their current products This will allow them to wait and see how well other patients react to the new products before deciding to switch " - U S Physician

"Whichever product is available first will become popular Our patients are well informed, some will switch right away and others will wait and watch " - U S Nurse

"I think we'd wait at least a year or more to see what happens Even the switch to recombinants, where there was a very clear advantage, was lengthy " - U S Nurse

MARITC

Kogenate SF is the reformulated product U.S. patients would most likely try. This preference is particularly strong among current Kogenate users.

U.S. Findings

Reformulated Product Most Likely to Try
- U.S. Patients -

	≤18	≥18	Recombinate Users	Kogenate Users
Kogenate SF	***54%***	***41%***	41%	***100%***
Refacto	10%	23%	17%	0%
Helixate NexGen	20%	12%	17%	0%
None	13%	12%	13%	0%
Other	3%	12%	12%	0%
• *Recombinate 3rd Generation*	*3%*	*6%*	*8%*	--
• *Albumin Free*	--	*6%*	*4%*	--
	n = 30	***n = 17***	***n = 24***	***n = 9***

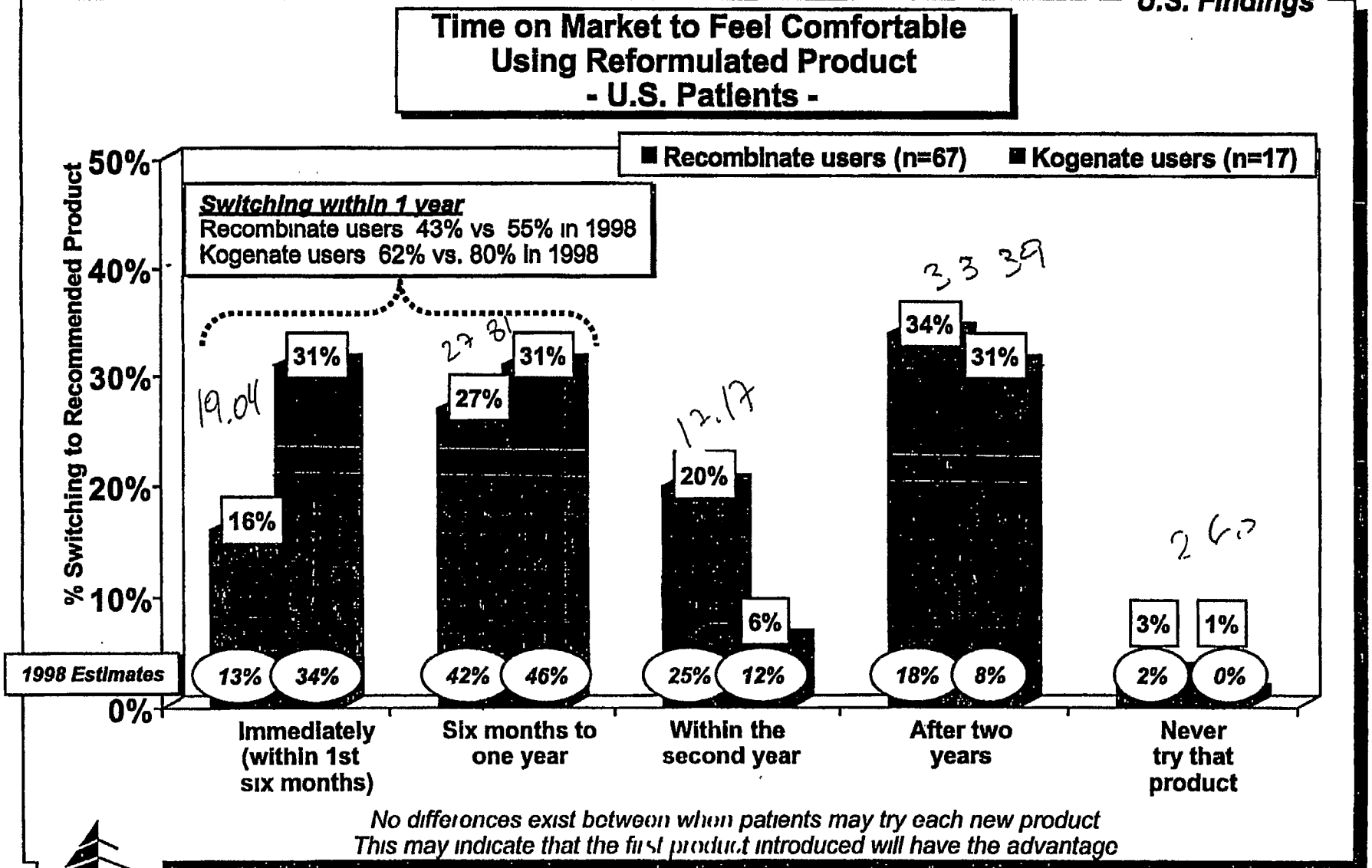
Indicates strong brand loyalty

MARTEC

GH001151

K genate users are more likely to switch to a reformulated product within the 1st year. However, both patient groups this year report a lower likelihood of switching within one year than last year.

U.S. Findings



MARTEC

Differing comments support the range of answers regarding patients' switching timing decisions.

U.S. Findings

U.S. Patients Switching Timing - Explanations -

Comments/Quotes

"I would be willing to try the product immediately if trials found them safer than my current product"
- U.S., <18 Bioclate User

"I'd wait between 6 months and 1 year Closer to one year would be enough exposure to the community to have good results"
- U.S., <18 Recombinate User

"I would have to weigh the benefits of safety with manufacturer availability and cost"
- U.S , ≥18 Recombinate User

"My physician would have to decide this He's the expert and I'd follow his lead"
- U S <18 Kogenate User

"I would want to be very cautious I'm very comfortable with what I am on now"
- U S , ≥18 Recombinate User

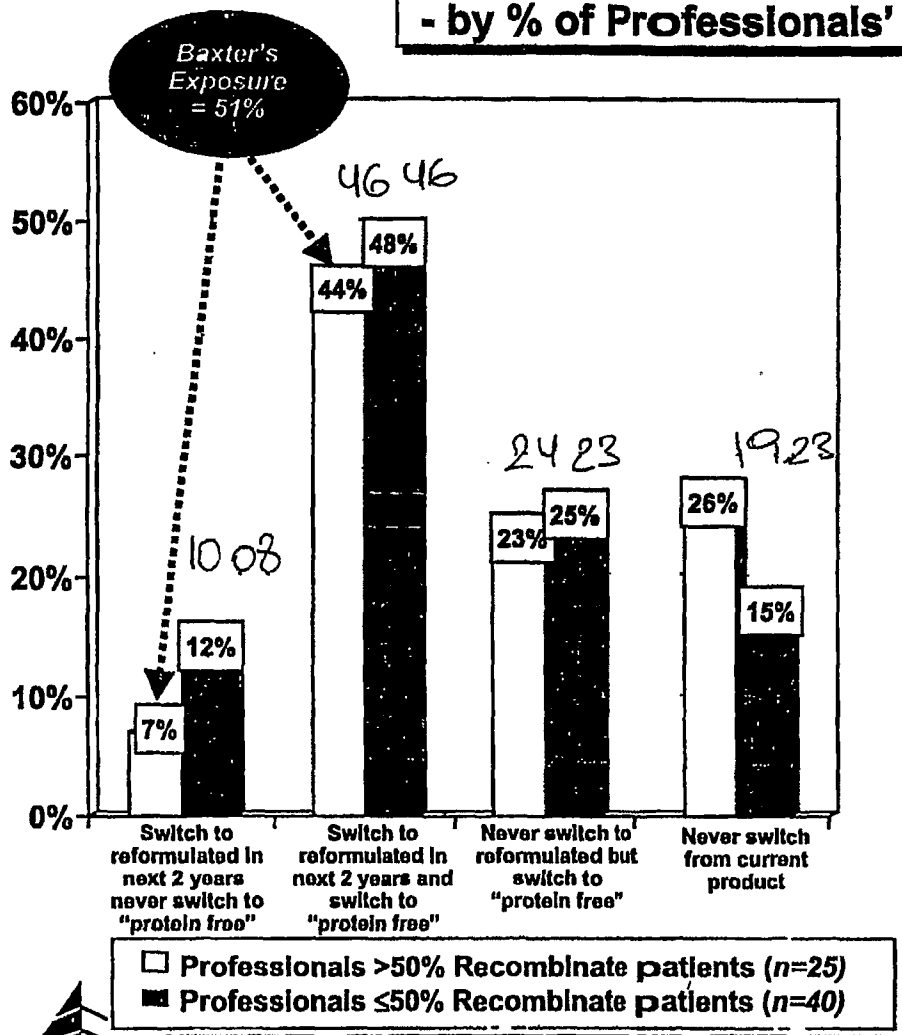
"I really wouldn't switch my son I see no difference in Kogenate SF and what we use now As long as they have human protein in the manufacturing process we're not interested"
- U S , <18 Kogenate User

MARTEC

E xter's potential share loss i: lower among "Baxter Friend " professionals. However, half of its U.S. market is still at risk even within that group.

U.S. Findings

Switching Scenarios
- by % of Professionals' Patients on Recombinate -



Comments/Quotes

"Some patients will switch twice, as they always want the safest one available "
- U S Physician

"Some people may wait for the protein free. That is the ultimate goal, to remove the proteins " - U S Physician

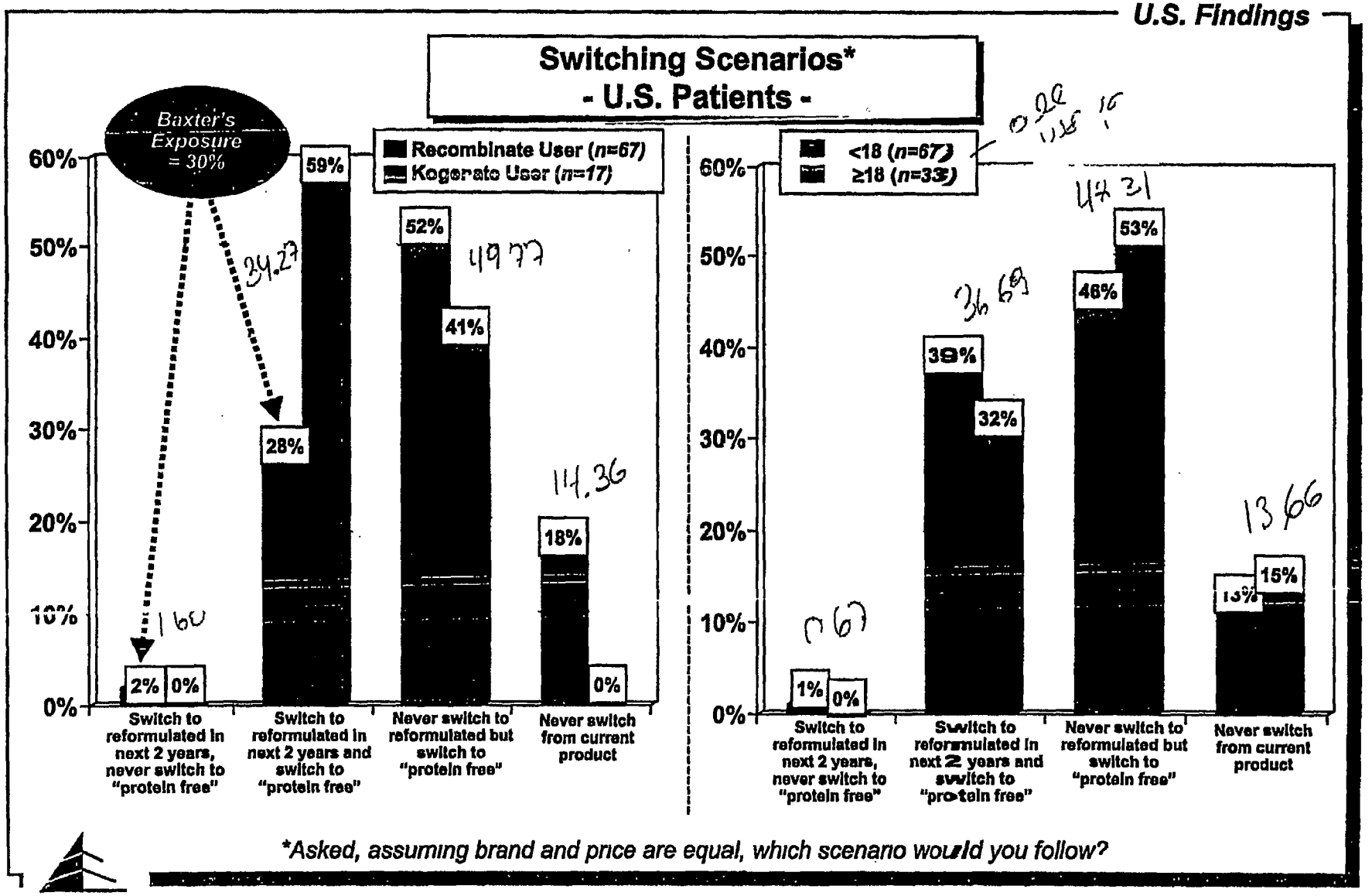
"It is hard for families to switch a product when the current one is working well Especially if they know a protein free one is coming out " - U S Nurse

"Since the products are already very safe, inhibitor incidence will be the key factor in determining whether patients will switch to the new products " - U S Physician

MARTLC

From a Recombinate patients' prospective, Baxter is at risk to lose 30% of its current U.S. market share to a reformulated product.

U.S. Findings



*Asked, assuming brand and price are equal, which scenario would you follow?

MARTEC

Many Recombinate users expressed satisfaction with their current product and willingness to wait for the "protein-free" product before switching.

U.S. Findings

Switching Scenarios
- U.S. Patients -

Comments/Quotes

"I'm afraid to change a lot due to risk of inhibitors. I'd rather just skip to the protein-free product because that eliminates exposure to human proteins."
- U.S., <18 Recombinate User

"Because the reformulated is still exposed to animal and human proteins I would wait for the protein-free."
- U S., ≥18 Recombinate User

"If it is only 2 years behind, I'd wait for the protein-free I would not switch before because I am comfortable with what I am on now "
- U S , <18 Recombinate User

"I'm not afraid of technology and will go with each improvement, as recommended by my physician "
- U S , <18 Kogenate User

"I am willing to try any new product that will increase the effectiveness of my treatment and will use the best available until the protein-free is out "
- U S , ≥18 Kogenate User

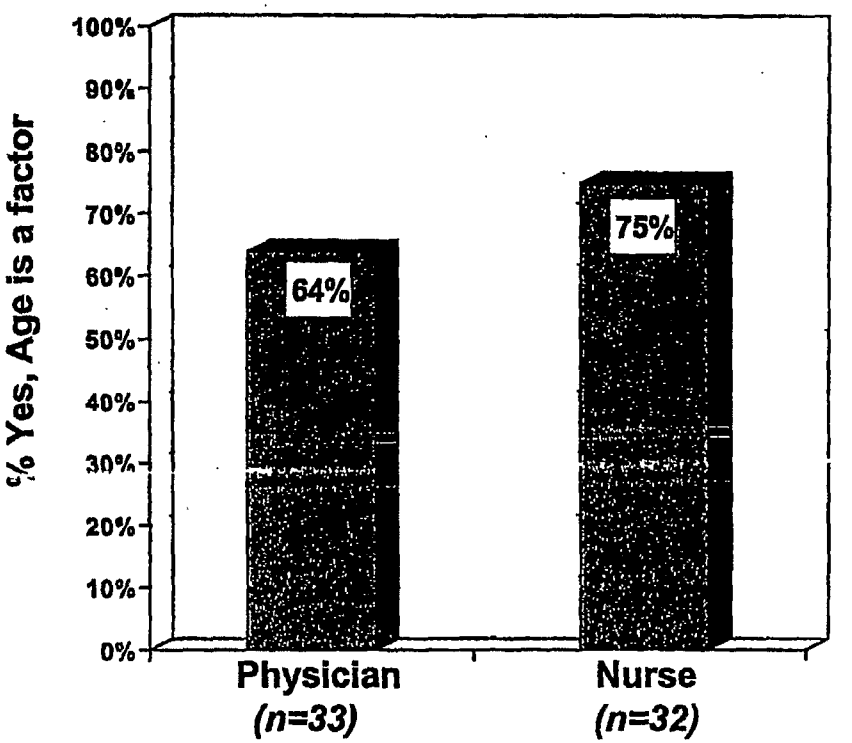
MARTL

U.S. professionals are more likely to recommend a second or third generation product to younger patients.

U.S. Findings

Is Patient's Age a Factor in Deciding to Switch Products?

U.S. Professionals



Comments

Comments/Quotes

"If I have an adolescent that is doing well on a product I am reluctant to switch. PUPs, however, will switch sooner if not immediately." - U S Physician

"Age and previous viral exposure both play a role They younger patients have had less viral exposure so we want them on the purest product possible - U S Nurse

"Most patients are free of infectious diseases at this point, but I would want to make sure all my patients receive the safest product possible regardless of age "

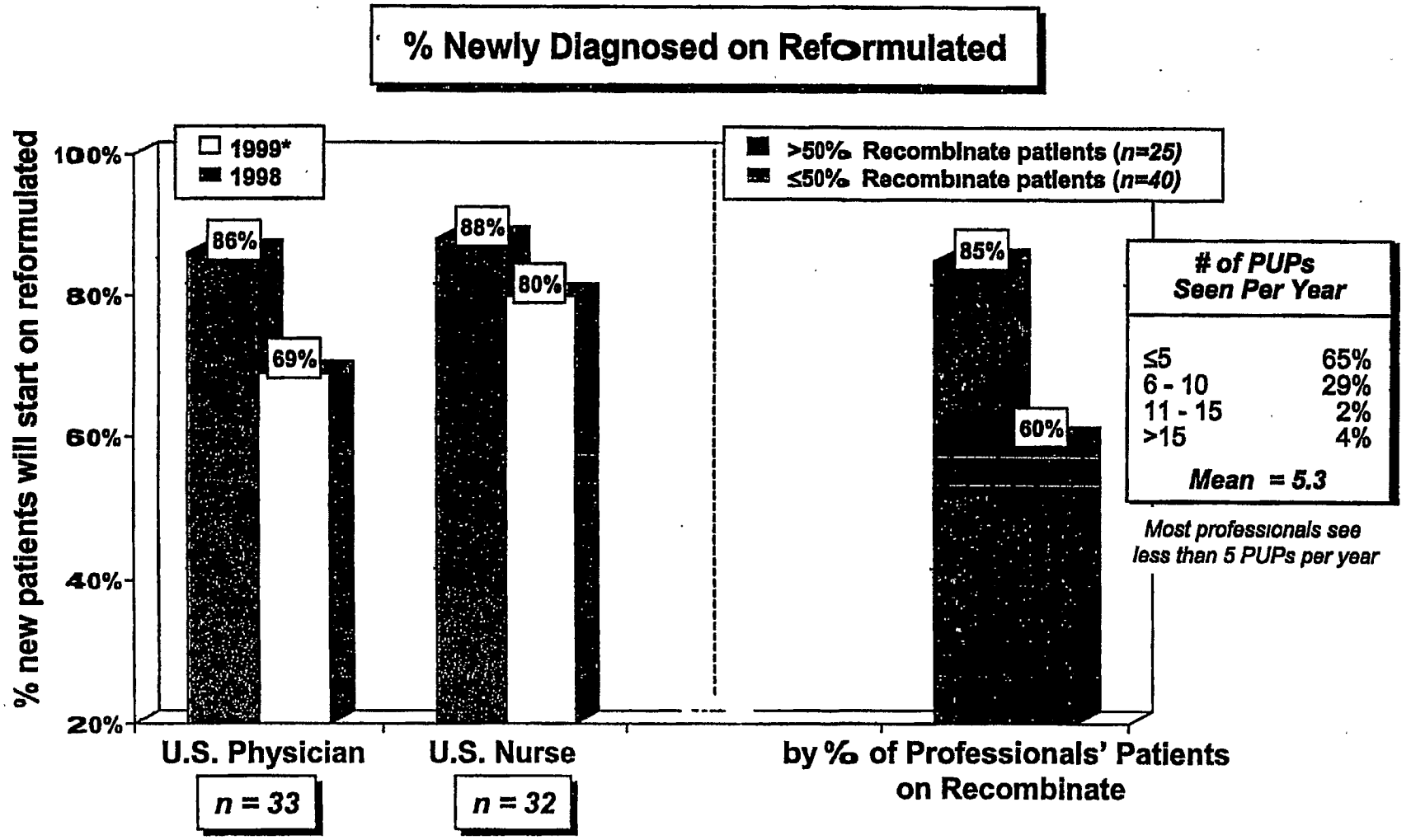
- U S Physician

MARTEC

GH001157

U . professionals are less likely to s rt PUPs on reformulated products 1999 than they were in 1998. "Baxter Friendly" professionals are also less likely than others to start PUPs on reformulated products.

U.S. Findings



*Differences may be the result of the "Protein Free" product scenario being presented in 1999 and not in 1998

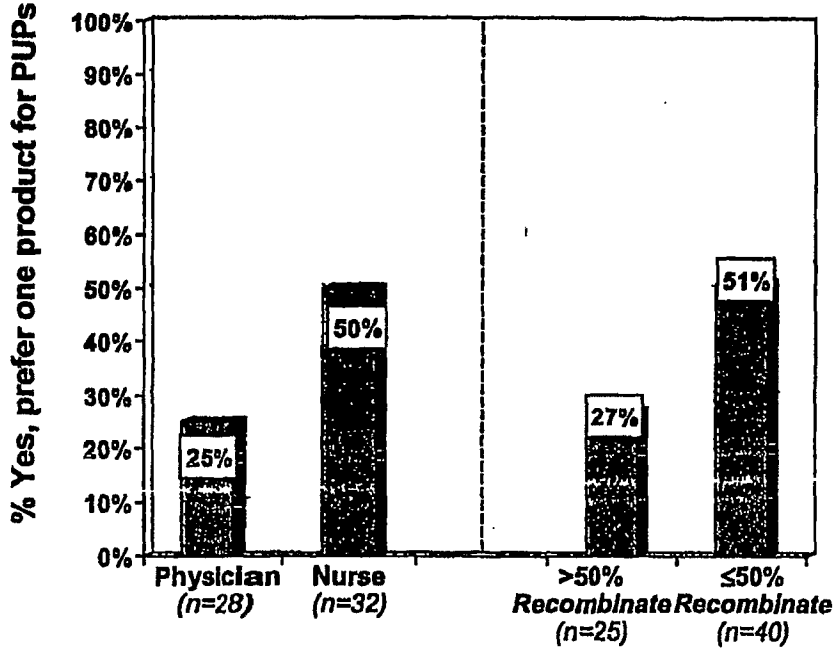
MARKET

When there is a preference for one reformulated product over another for PUPs, physicians and "Baxter Friendly" professionals prefer Refacto.

U.S. Findings

Will One Reformulated Products be Preferred for PUPS?

U.S. Professionals



	Physician (n=28)	Nurse (n=32)	>50% Recombinate (n=25)	≤50% Recombinate (n=40)
• Refacto	14%	16%	15%	12%
• Kogenate SF	4%	25%	8%	24%
• Helixate NG	0%	6%	0%	5%
• Albumin Free	4%	0%	4%	2%
• No answer	3%	3%	0%	8%
	25%	50%	27%	51%

Comments

Comments/Quotes

"Refacto is special in that it is actually a different product, not just a reformulation"
- U S. Physician

"Kogenate SF will be the most likely because that is the product people are more familiar with" - U S Nurse

"Refacto would not be as attractive if we have to do a totally different lab test"
- U S Physician

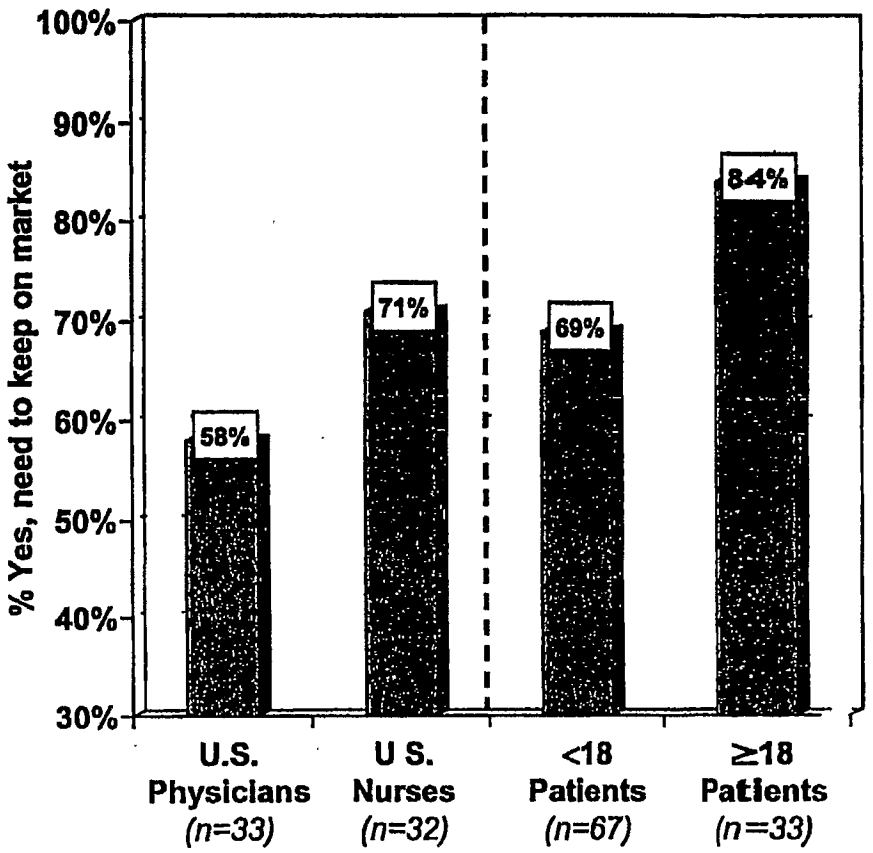
"I do not have enough information about these products to make an informed decision" - U S Physician

MARTEC

More adult patients expresse the need to keep previc s generation products on the market after next generation products are introduced.

U.S. Findings

Need to Keep Previous Generation Products on Market?



Comments/Quotes

"I'd like to keep the old product around for 5 years to make sure there is no likelihood of inhibitor formation" - U.S Physician

"Some patients prefer to stay with the product they are comfortable with and I would respect that" - U S Physician

"Unless price and availability were major issues, then there is no need to keep the older product around" - U S Physician

"If the new products cost more, I'd certainly want to keep the old products around They are also needed in case of shortages"

- U S , ≥18 Recombinate User

MARTI C

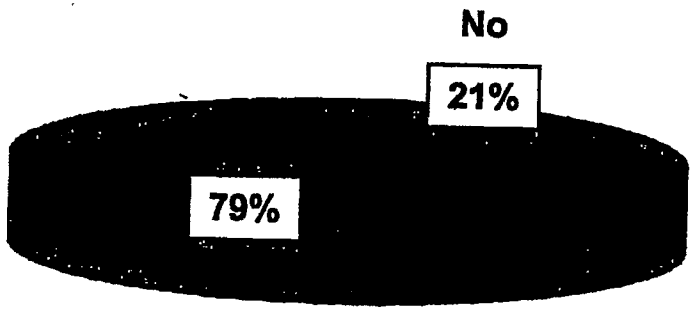
When specified, the *lack of continuous infusion* was mentioned more than *lack of room temperature storage* as a concern by U.S. professionals.

U.S. Findings

Convenience Features with New Products

U.S. Professionals

Will lack of these features influence your opinion of the new products?



% concerned over lack of...	
– Continuous infusion	***20%***
– Room temperature storage	10%
– Both issues/ one not specified	49%

n = 65

Comments/Quotes

"I would not like that at all Continuous infusion is used quite often at the hospital Patients also travel a lot now and need room temperature storage " - U S Physician

"No room temperature storage would be a big problem Over 80% of my patients are home healthcare and I can't guarantee they will store the product properly " - U S Physician

"The lack of these features would deter patients from switching big time " - U S Nurse

"If the new product were excellent, you may put up with these inconveniences " - U S Nurse

MARTEC

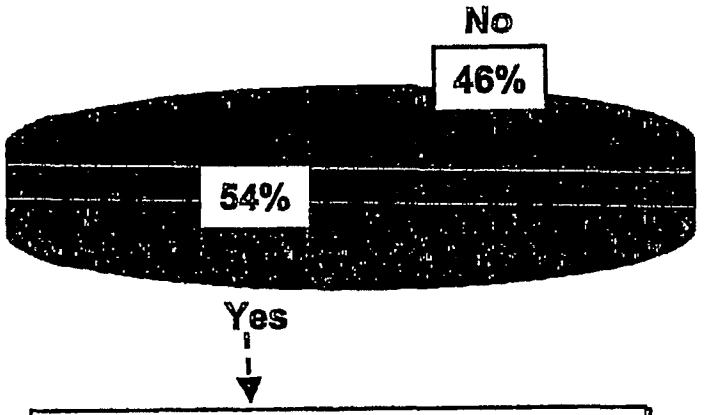
Patients are more willing than physicians to put up with these inconveniences, if they get a safer product.

U.S. Findings

Convenience Features with New Products

U.S. Patients

Will lack of these features influence your opinion of the new products?



% concerned over lack of...	
– Continuous infusion	12%
– Room temperature storage	*19%*
– Both issues/ one not specified	23%

n = 100

Comments/Quotes

"Safety outweighs convenience, so this is not that big of an issue."
- U S , <18 Recombinate *User*

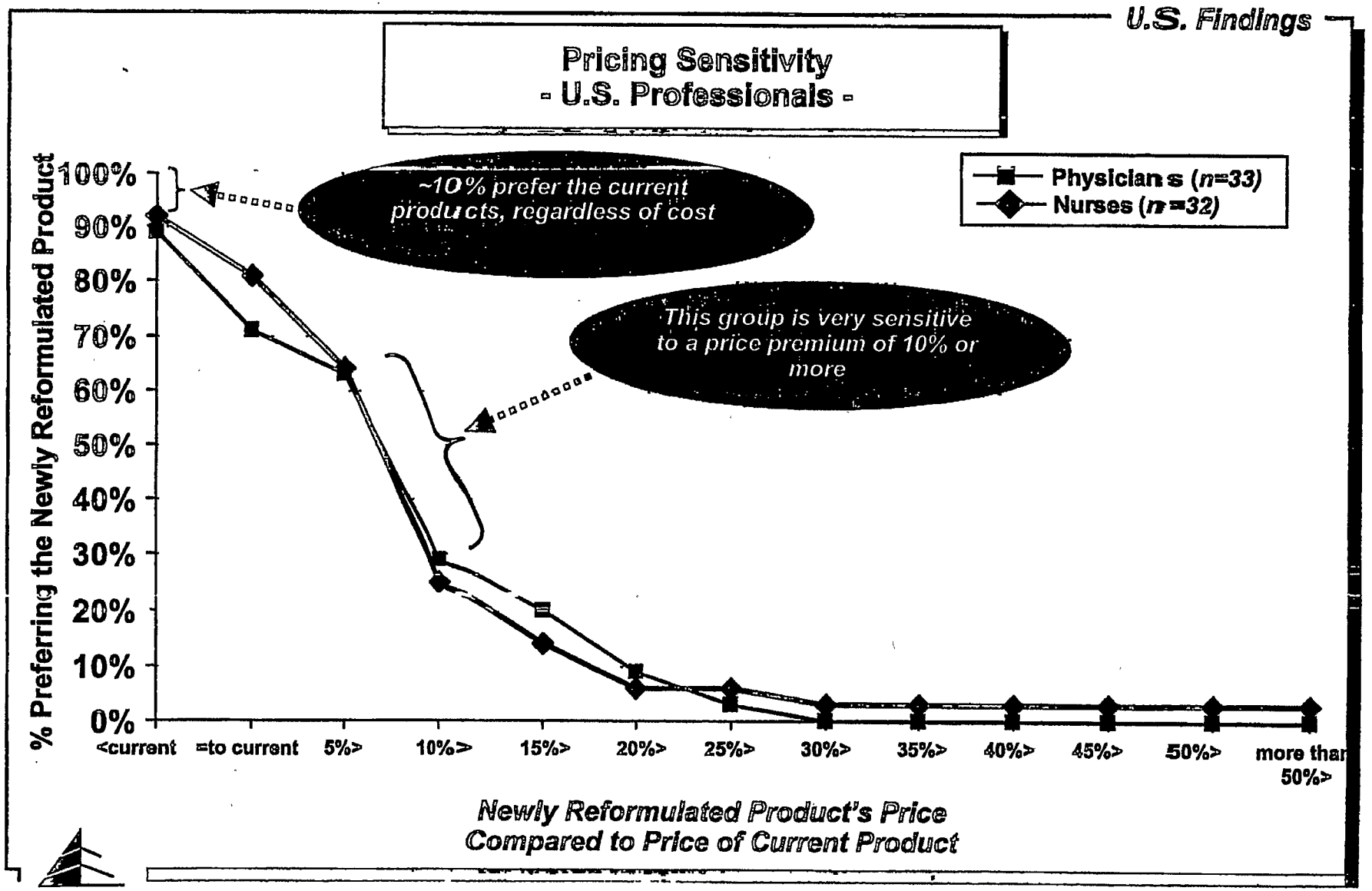
"I'd still use the safer product, but we'd need to keep the previous products around for traveling and emergencies "
- U S , <18 Kogenate User

"I'd be less likely to use them I like to throw it in the backpack and go hiking "
- U S , ≥18 Recombinate User

"We can deal with the refrigeration, but continuous infusion is necessary if my child needs surgery "
- U S , <18 Recombinate user

MARITC

The added safety promised by the newly reformulated products is worth a 5% premium to most U.S. professionals, but not 10%.

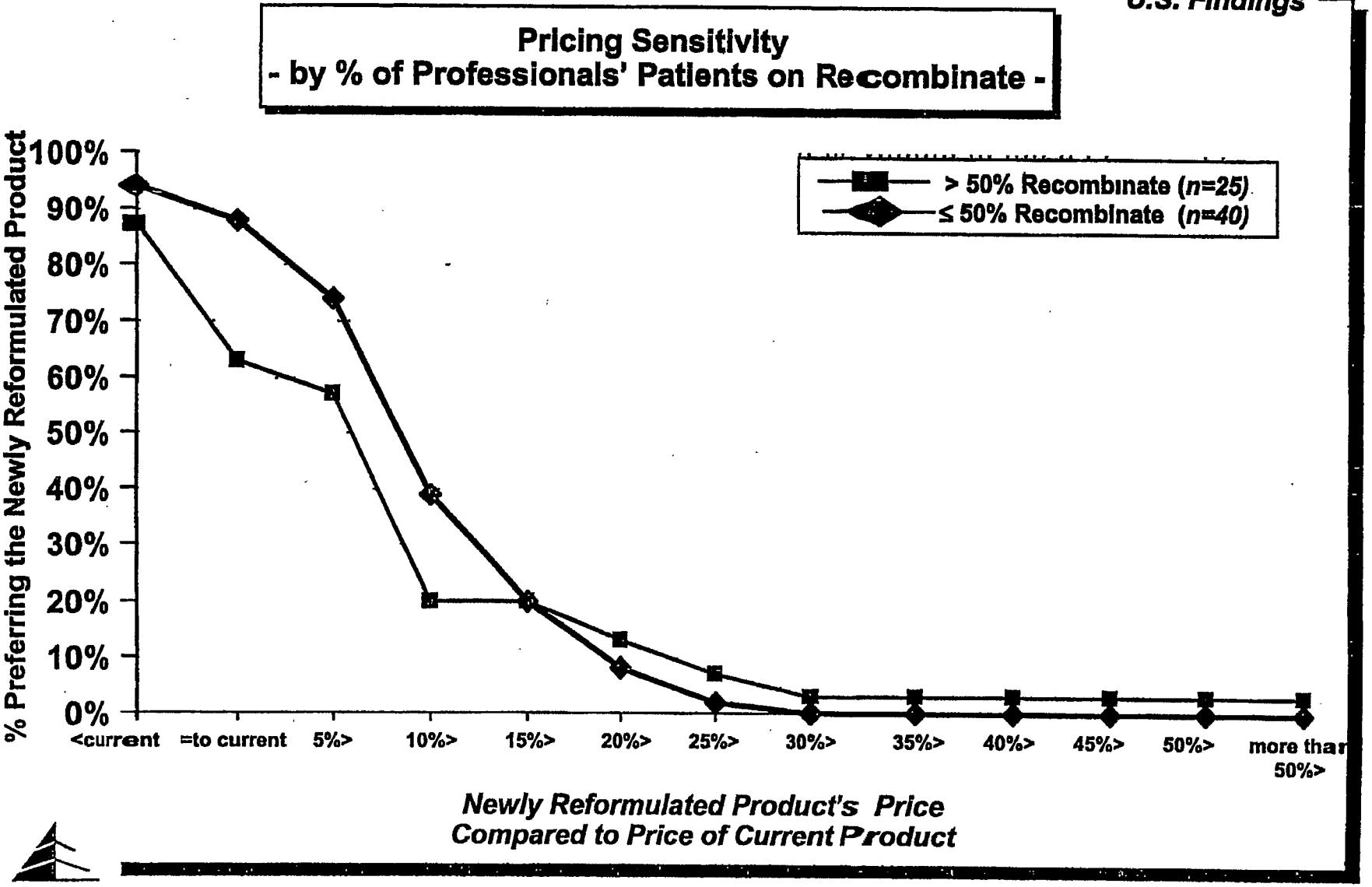


MARTEC

GH001163

"Baxter Friendly" professionals appear to place less value on the newly reformulated products.

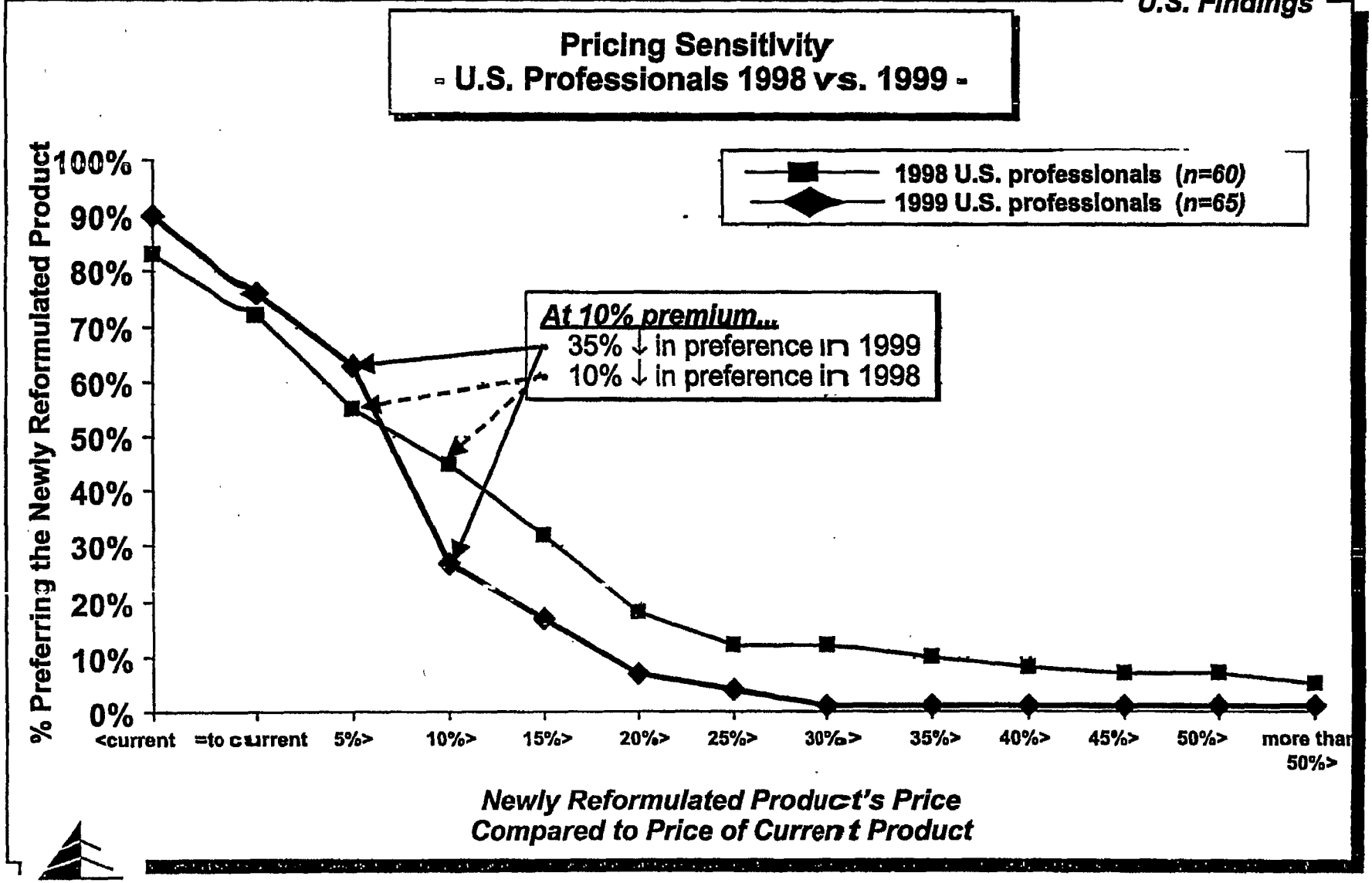
U.S. Findings



MARTEC

U.S. professionals have become more price sensitive this year to a 10% premium for the reformulated products.

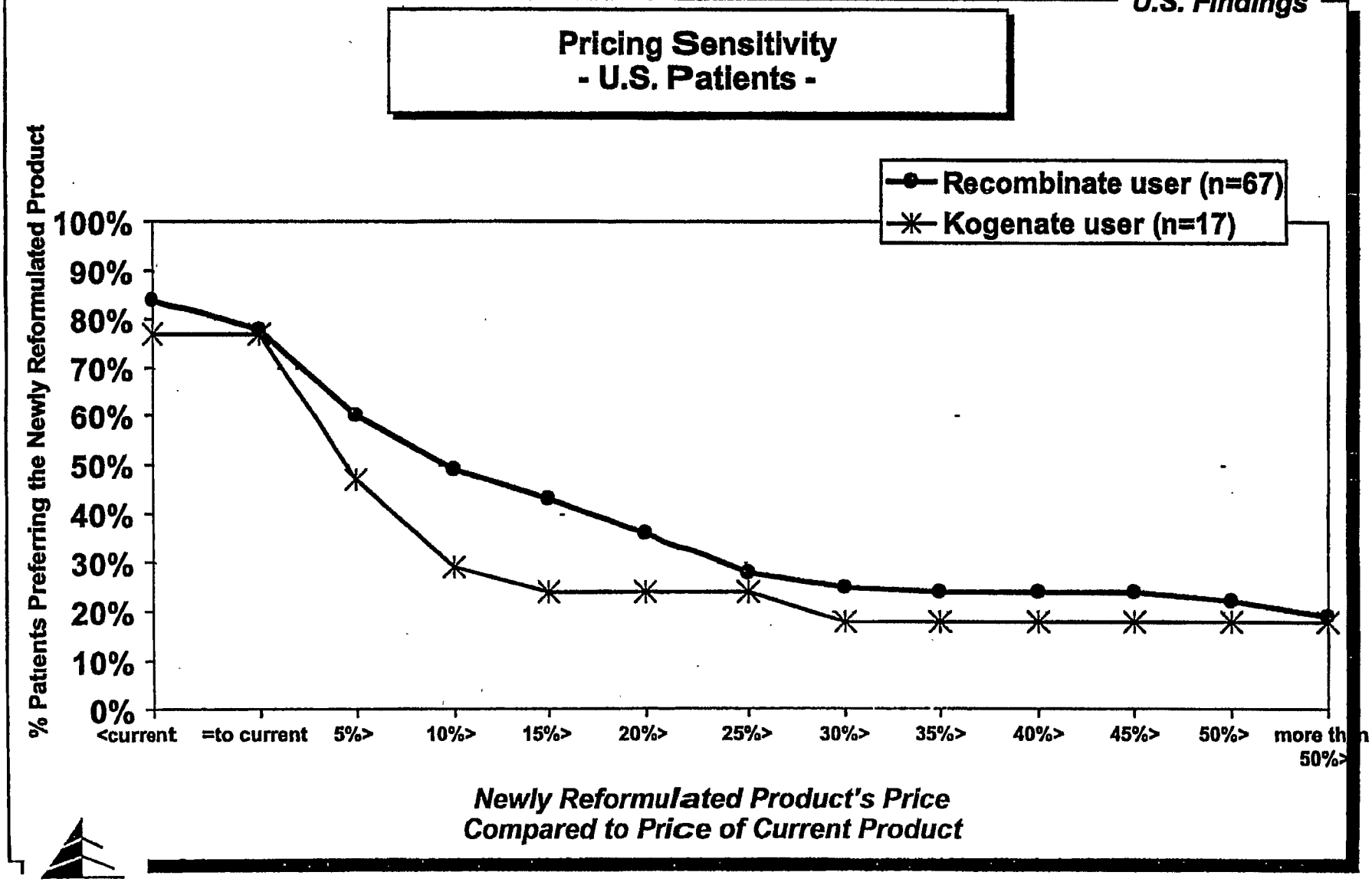
U.S. Findings



MARTEC

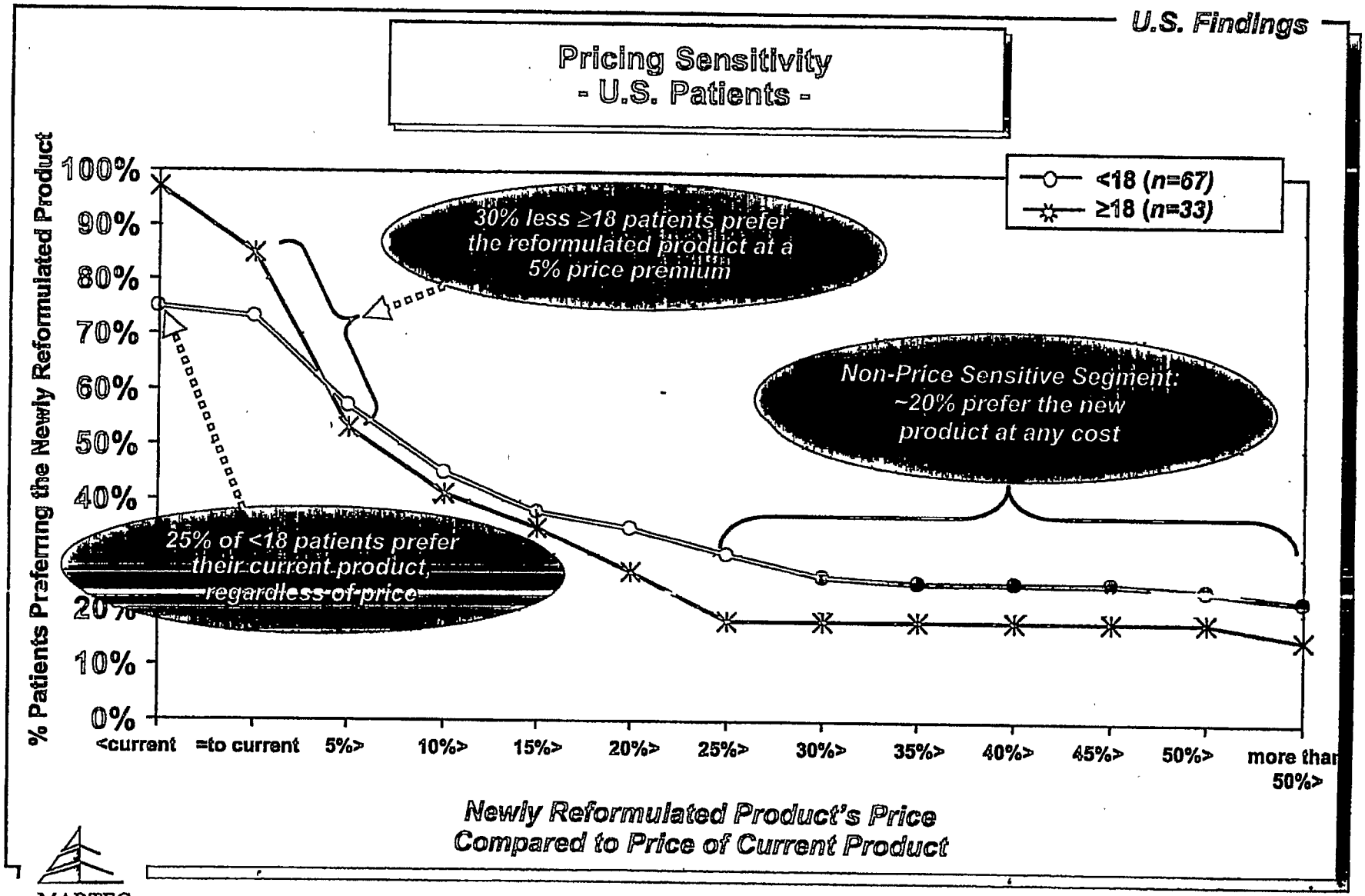
Kogenate users are more price sensitive than Recombinate users *(i.e. fewer prefer the reformulated product at higher prices).*

U.S. Findings



MARTLC

Older patients' preference is more affected by price than younger patients.

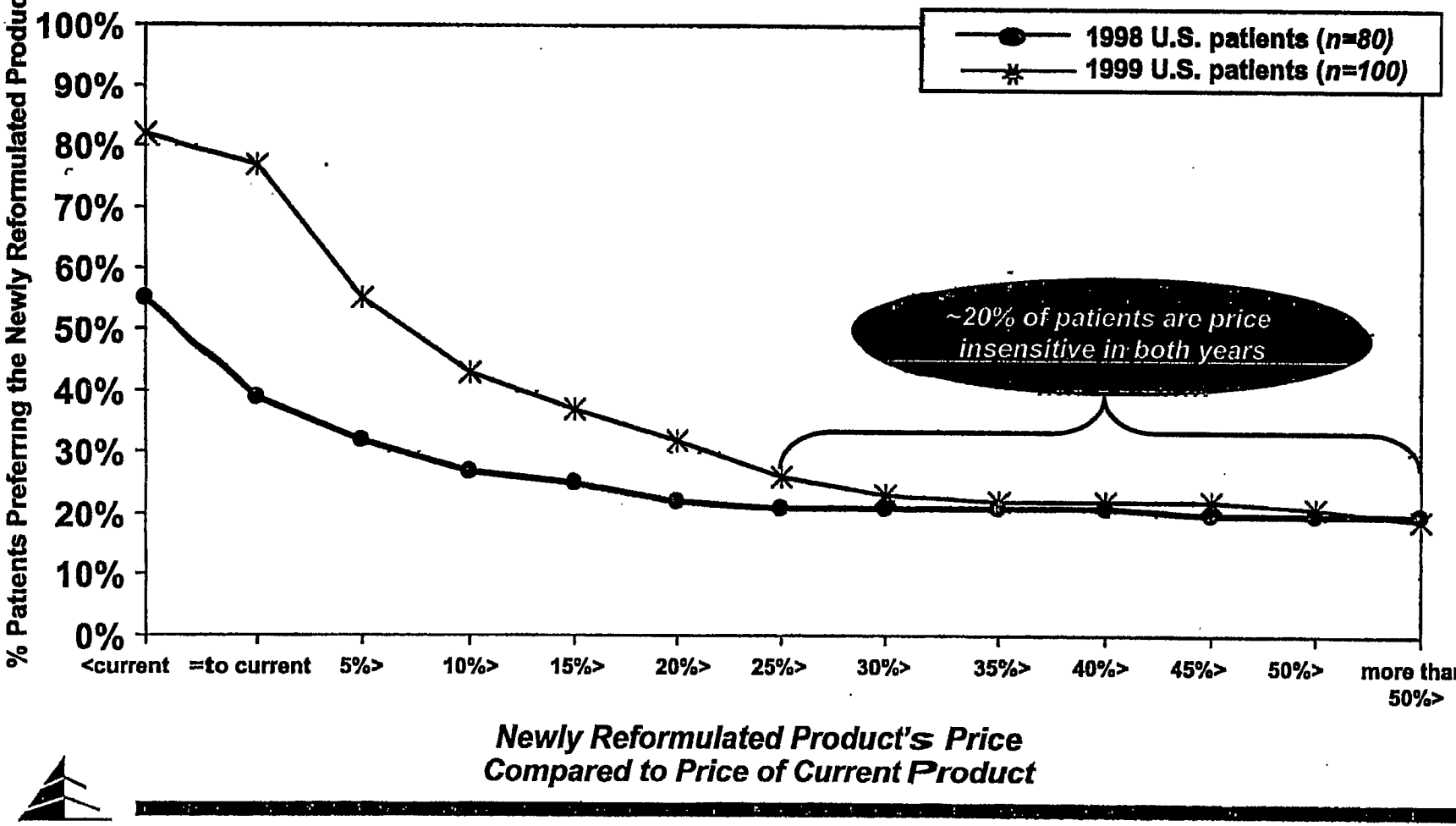


GH001167

In 1999, more patients indicate they prefer the newly reformulated product at a lower or equal cost. In both years, 20% of the patients prefer the reformulated product regardless of its cost.

U.S. Findings

Pricing Sensitivity
- U.S. Patients 1998 vs. 1999 -



MARIL C

Many respondents felt the benefit of the reformulated products did not justify much of a price premium.

U.S. Findings

Pricing Sensitivity Comments

Professional Comments

"For younger patients I would pay more for a product The older patients have to worry more about their lifetime insurance caps " - U S Physician

"The need for switching to this product is based on a theoretical concern, rather than a real one. I have a hard time saying that patients should pay 10% more for this improvement " - U S Physician

"Since there is no real difference in the products, families will make this decision based purely on price If price is equal, they'll likely stay with their current product." - U S. Physician

Patient Comments

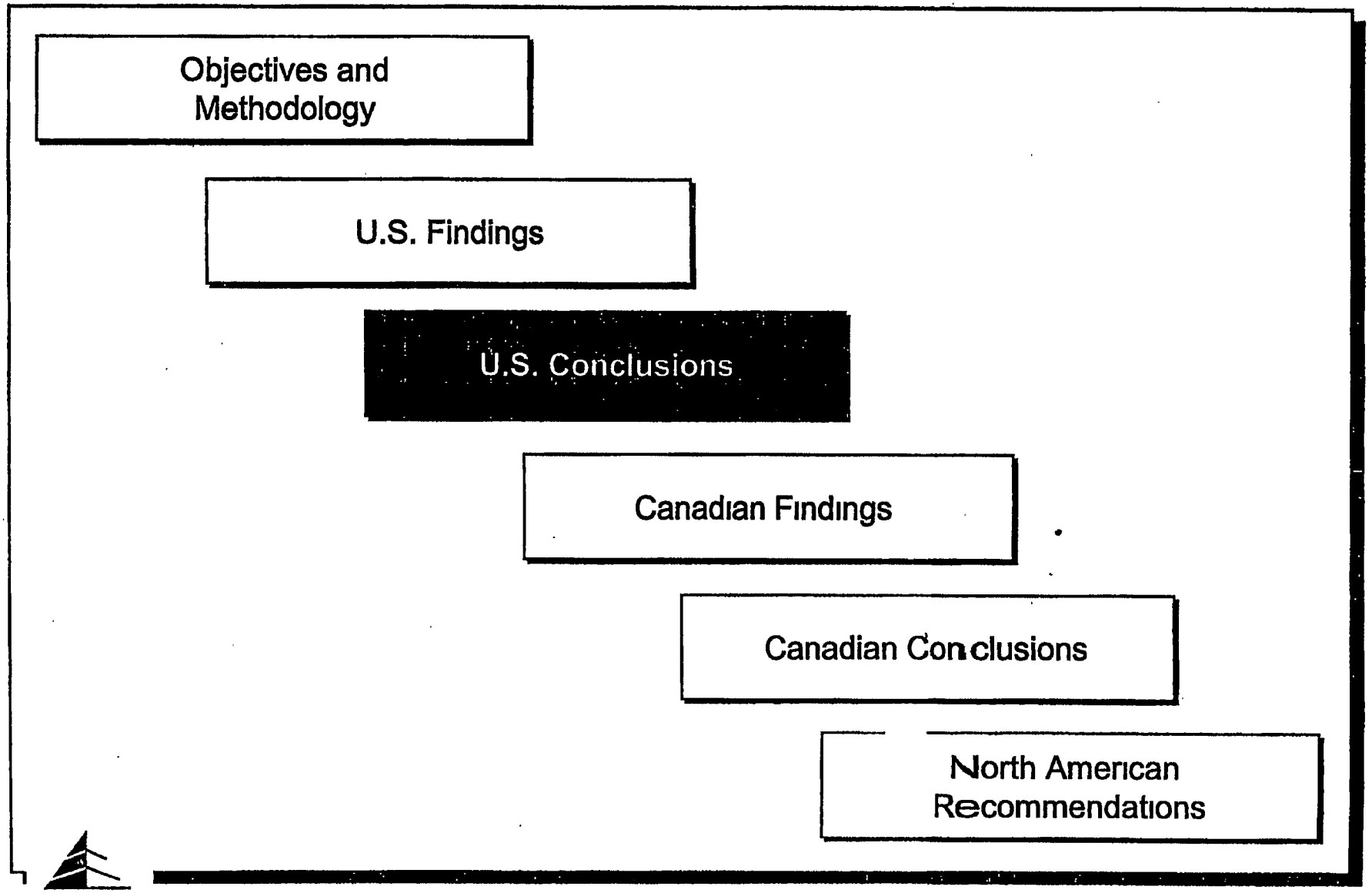
"I want to use what is best for my son regardless of cost " - U S , <18 Recombinate User

"It is so expensive now and the current products are pretty safe So if cost were much of a difference we would stay with the current product I'm also not sure how much more our insurance will pay " - U S , <18 Kogenate User

"Based on the safety record of albumin, I don't think the new products offer much of a benefit, so it's not worth it to pay more " - U S , ≥18 Helixate User

MARTEC

Agenda



MARITC

This summary of findings is based upon the 176 Phase I and II U.S. interviews.

U.S. Conclusions

Current Product Environment Findings

1 Baxter's Recombinate is the most used recombinant FVIII replacement as reported by physicians in this sample, holding a 48% share of recombinant use

2 U.S professionals report that prophylaxis treatment is practiced by 30% of their patients Patients under the age of 18 report they are three times as likely as patients over 18 (62% versus 18%) to follow a prophylaxis treatment program

3 100% of adult and 87% of <18 patients in this study have switched products at least one time

4 The promise of a safer product via less exposure to viruses and human protein were the key reasons for previous switching Physicians provided the greatest influence in a patient's switching decision Own research was also an important influence

5 Good viral safety record and less exposure to human proteins were listed as the most liked features of recombinant products

6 Professionals mentioned high price most often as a dislike of recombinant products Patients listed still contains human albumin

7 Viral safety in general is clearly the most important element of safety

MARTEC

Key U.S. Findings (continued)

U.S. Conclusions

Current Product Environment Findings *(cont.)*

8. Baxter rated the highest in terms of reputation, even among Kogenate users.
9. Professionals view all recombinant products equally in terms of performance, except for Availability, where Recombinate is rated significantly higher.
10 Patients rated Recombinate over Kogenate in 3 of 10 Key Switching Criteria· availability, latest technology and supplier reputation
11 Patients' overall satisfaction with Kogenate has decreased, now Recombinate rates significantly ahead of Kogenate
12. Respondents mentioned the availability of patient educational material as a key selection criteria not originally listed
13 Smaller vile sizes (5 ml) and a greater range (150, 750, >1500 IU) and availability of potency strengths is desired by patients

MARKET

Key U.S. Findings (continued)

U.S. Conclusions

New Product Awareness & Knowledge

1 Refacto is the new product with the highest share of awareness in the U S

2 Physicians' awareness of both Refacto and Kogenate SF has increased Awareness among patients did not change and remains low

3 Forty-nine percent of patients and 96% of professionals claim to know that human albumin will be removed as a stabilizer for the second generation recombinant products

4 Two-thirds of patients and 93% of professionals claimed to know that human/animal protein will be used in manufacturing process of the new products, 88% and 63%, respectively, were concerned over this.

5 Patients (33%) and physicians (78%) had knowledge of the use of a modified gene, ~40% were concerned

6 Patients (24%) and physicians (28%) had the least knowledge about new products not allowing continuous infusion and room temperature storage, 68% and 83%, respectively were concerned

7 56% of professionals knew of the use of a different assay and 83% were concerned

8 Due to the removal of human albumin as a stabilizer, second generation recombinant products are expected to be safer than the current recombinant products In fact, many respondents believe these products will be "albumin free"

MARTEC

Key U.S. Findings (continued)

U.S. Conclusions

Reformulated Switching Findings

1. Many physicians and patients could not determine their likelihood to switch without clinical trials proving lower exposure to viral contamination and no greater incidence of inhibitors
2. Professionals show no real preference for Refacto or Kogenate SF.
3. Kogenate users strongly prefer Kogenate SF over Refacto and Helixate NexGen.
4. Approximately 40% of Recombinate users and 60% of Kogenate users would feel comfortable switching within one year of a reformulated product's introduction, both down from 1998
5. Professionals estimate over 50% of their patients will switch to a reformulated product before a "protein free" one is available They expect 29% of their patients to wait for a "protein free" before switching and 19% never to switch from what they are using now
6. Only 30% of Recombinate patients, versus 60% of Kogenate patients, estimate they will switch to a reformulated product before a "protein free" one is available 52% of Recombinate patients estimate they will wait for a "protein free" before switching compared to 41% of Kogenate patients The remaining 18% of Recombinate users claim they will never switch from their current product
7. Age is a factor in a professionals' decision to switch products, they are more likely to use newer products on younger patients first.

MARITC

Key U.S. Findings (continued)

U.S. Conclusions

Reformulated Switching Findings *(cont.)*

8 Only 70% of physicians claim they will start their newly diagnosed patients (PUPs) on reformulated products once they are introduced, down from 86% in 1998 Physicians express a slight preference for Refacto for their PUPs, while nurses express a slight preference for Kogenate SF

9 Many adult patients (84%) express the need to keep previous generation products on the market Fewer physicians (58%) express this need

10 Professionals, at 79%, are more likely than patients (54%) to be influenced by the inability for continuous infusion and room temperature storage. Specifically, continuous infusion is more of a concern among professionals and room temperature storage is the main concern among patients

11. Martec believes in the U S., Kogenate SF will provide the greatest threat to Recombinate This is due to Kogenate SF's "first to market" advantage and the potential assay problems with Refacto

Pricing Findings

1 The current pricing of recombinant products is viewed as being very high

2 20% of patients are not price sensitive, they prefer the reformulated product, regardless of price

3 Physicians are price sensitive to a 10% premium Preference for the reformulated products drops significantly from 62% at a 5% premium to 27% at a 10% premium

MARTEC

While the concern of *viral safety* appeared to increase among U.S. respondents from 1998 to 1999, the expected speed and likelihood of switching to a reformulated product has decreased.

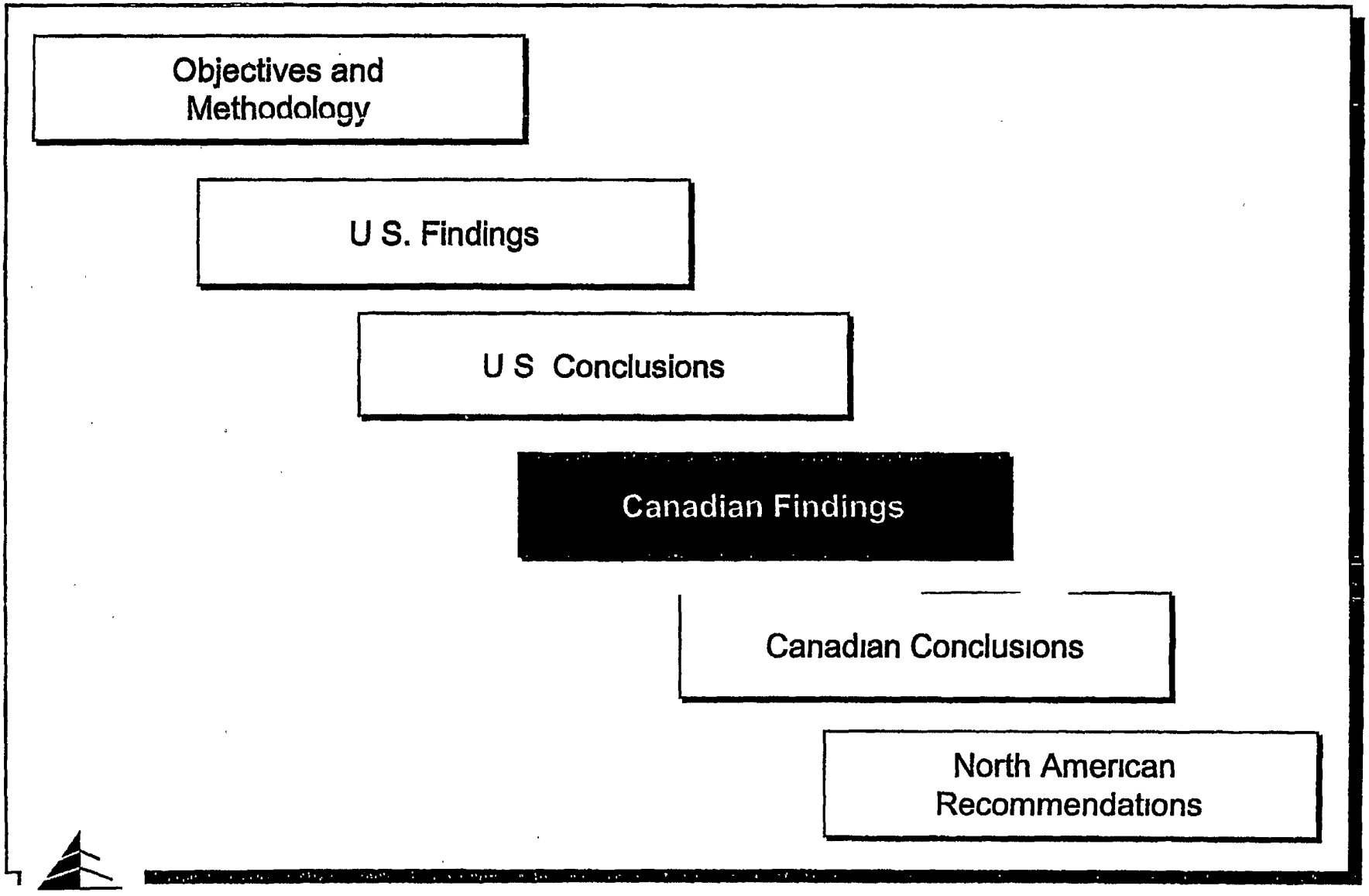
Conclusions

U.S. Findings
-1998 to 1999 Comparison -

- Patient use of Recombinate has increased in 1999, while Kogenate use has decreased among our sample
- The concern for viral safety is more apparent, unprompted elements are mentioned more often and importance ratings have increased
- Patients rate their current products higher in 1999 in terms of meeting their safety needs
- Baxter reputation ratings are higher, while other manufacturers results are mixed
- Recombinate gained a significant advantage over competition in *product availability* in 1999
- Professionals' unaided awareness of Refacto has grown significantly, while Kogenate SF unaided awareness grew only slightly, aided awareness of both products also grew
- Patient awareness of both products did not change and remains low
- A significantly higher percent of professionals identify "albumin free" with Refacto and Kogenate in 1999
- Professional awareness has risen significantly regarding reformulated products
  - *-not using albumin to stabilize*
  - *-still exposed to proteins in manufacturing*
  - *-being based on modified Factor VIII gene*
- U S professionals expect fewer patients to switch to a reformulated product now (59%) than they did last year (78%)
- Professionals have become more price sensitive, with their threshold dropping from 10% to 5%
- 20-25% of patients remain price insensitive

MARITC

Agenda



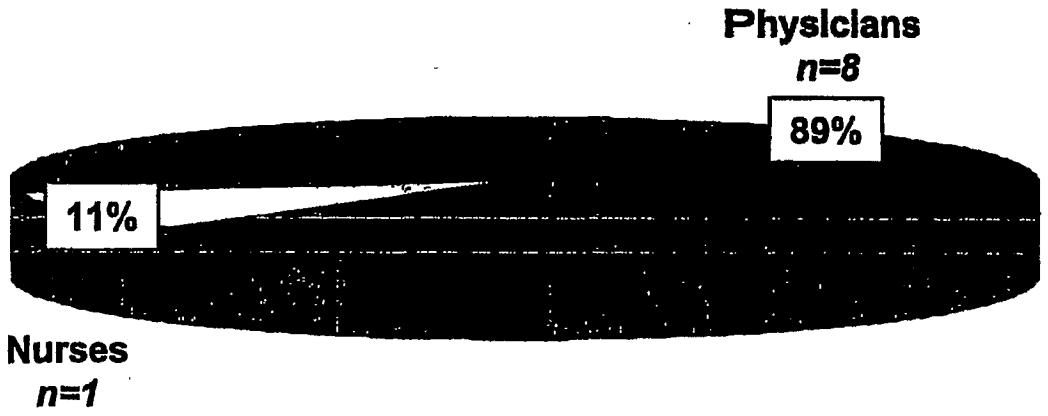
MARITEC

GH001177

The Canadian sample fell slightly short of the ten physicians originally targeted. No patients were interviewed in Canada.

Canada Findings

Canadian Professionals
- Phase II -



n = 9

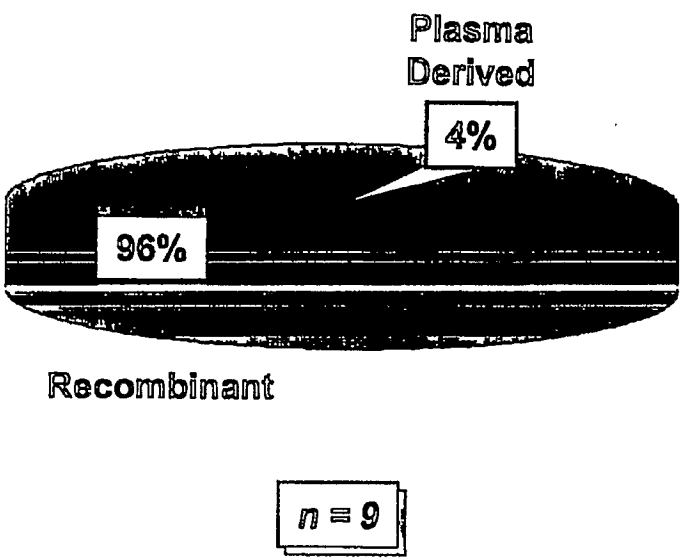
MARITC

Kogenate is the product used by most Canadian physicians' patients. No Centeon usage was reported by this sample.

Canada Findings

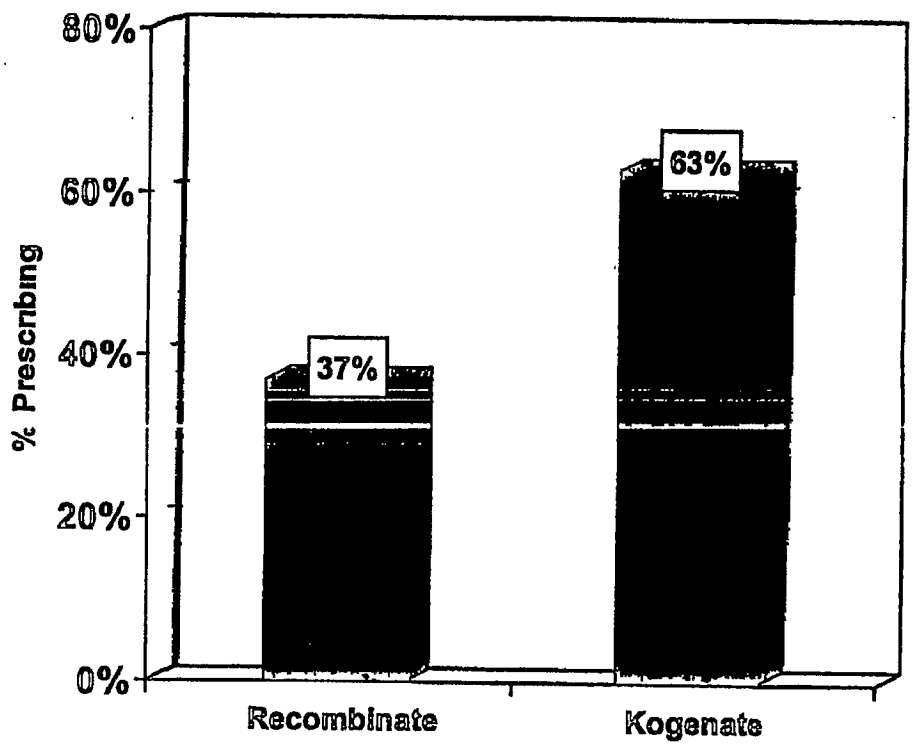
Product Type Prescribed
- Canadian Professionals -

% of Patients on Each Product Type



n = 9

Recombinant Products Used
- % of Recombinant Share -



MARTEC

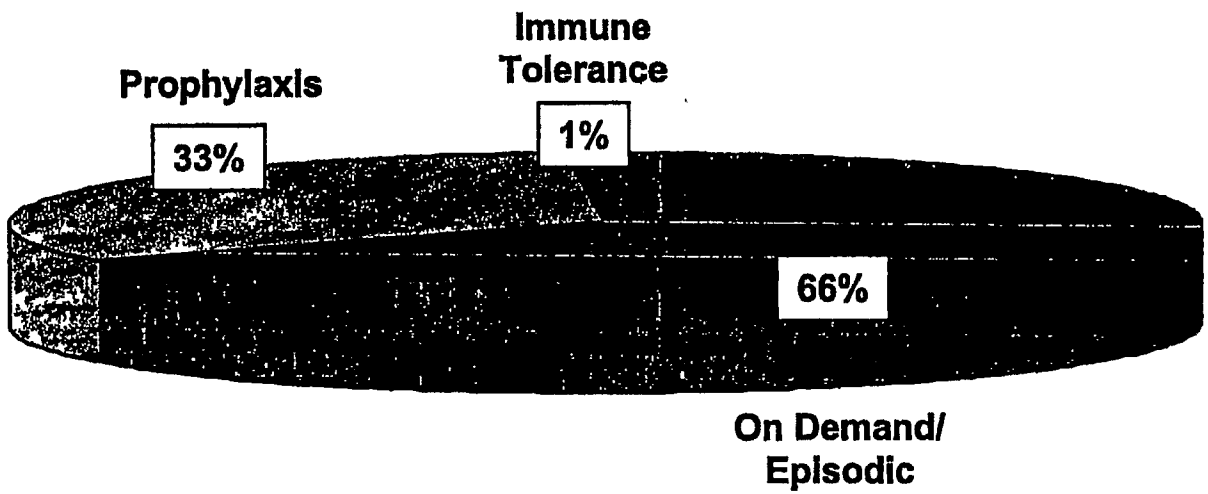
GH001179

Episodic treatment is twice as common as prophylaxis in Canada.

Canada Findings

Current Treatment Regimen
- Canadian Professionals -

% of patients currently on...



n = 9

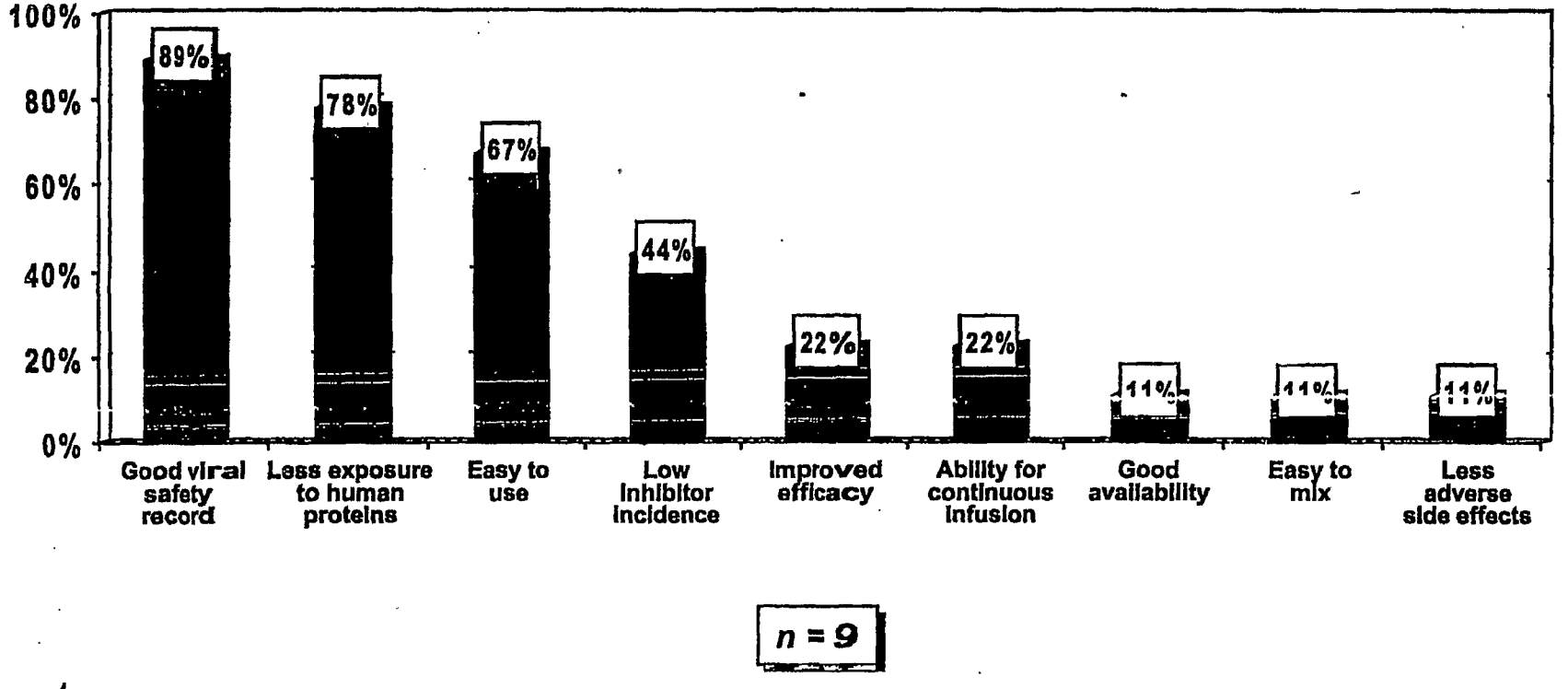
MARITC

Good viral safety record, less exposure to human proteins and easy to use are what Canadian professionals like the most about their recombinant products.

Canada Findings

Current Product "Likes"
- Unaided -

Canadian Professionals



n = 9

MARTEC

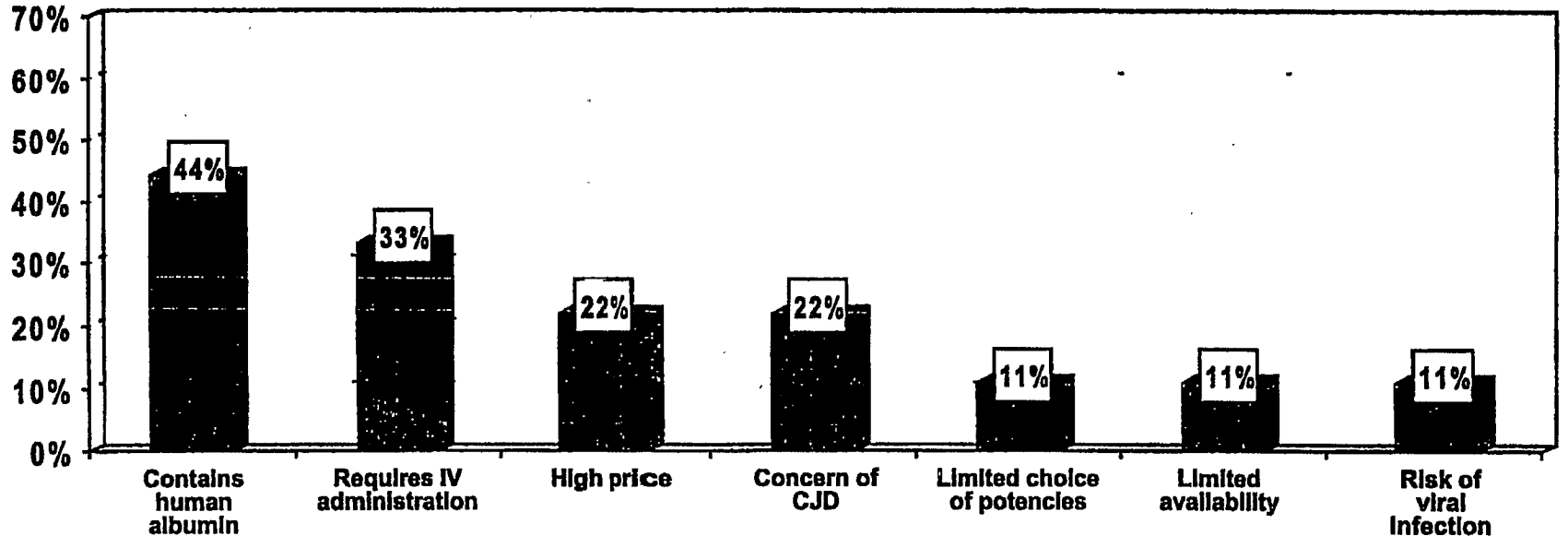
GH001181

The top Canadian dislike is that the product *contains human albumin*.

Canada Findings

Current Product "Dislikes"
- Unaided -

Canadian Professionals

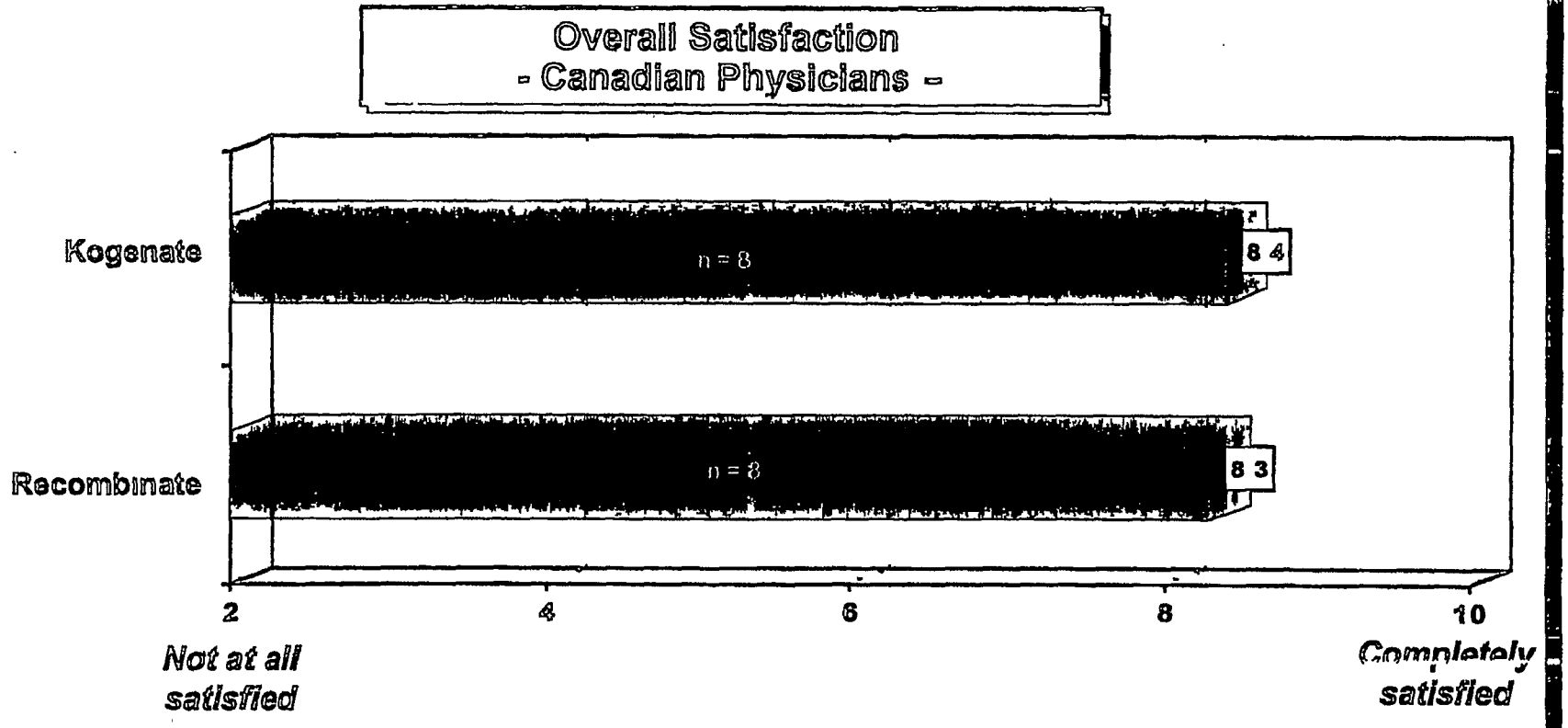


n = 9

MARTI C

Canadian physicians are equally satisfied with Recombinate and Kogenate.

Canada Findings



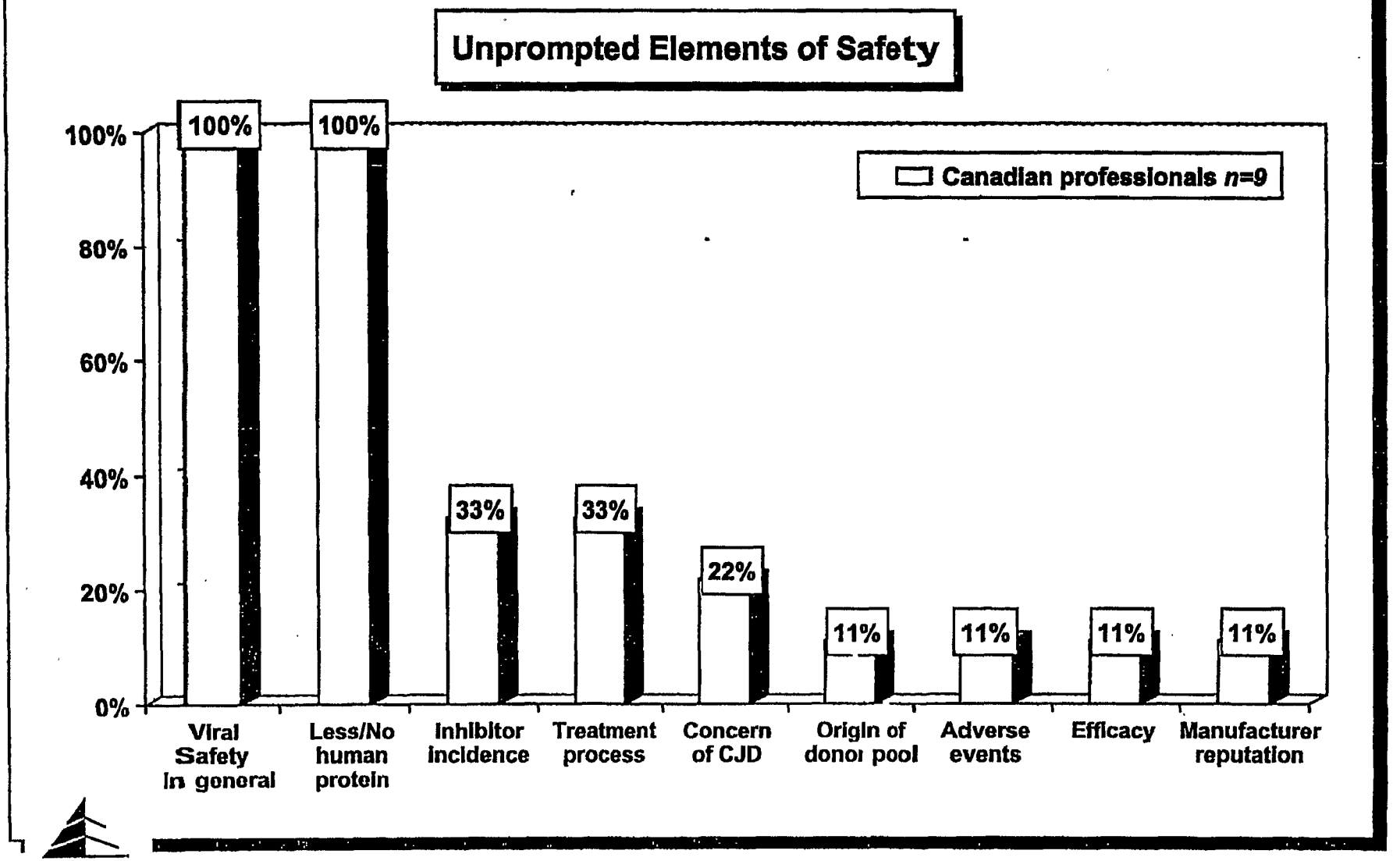
"The two products are different, but they work equally as well"

"Both have albumin so we need to immunize our patients against Hepatitis I don't think there is a significant difference between the products"

MARTEC

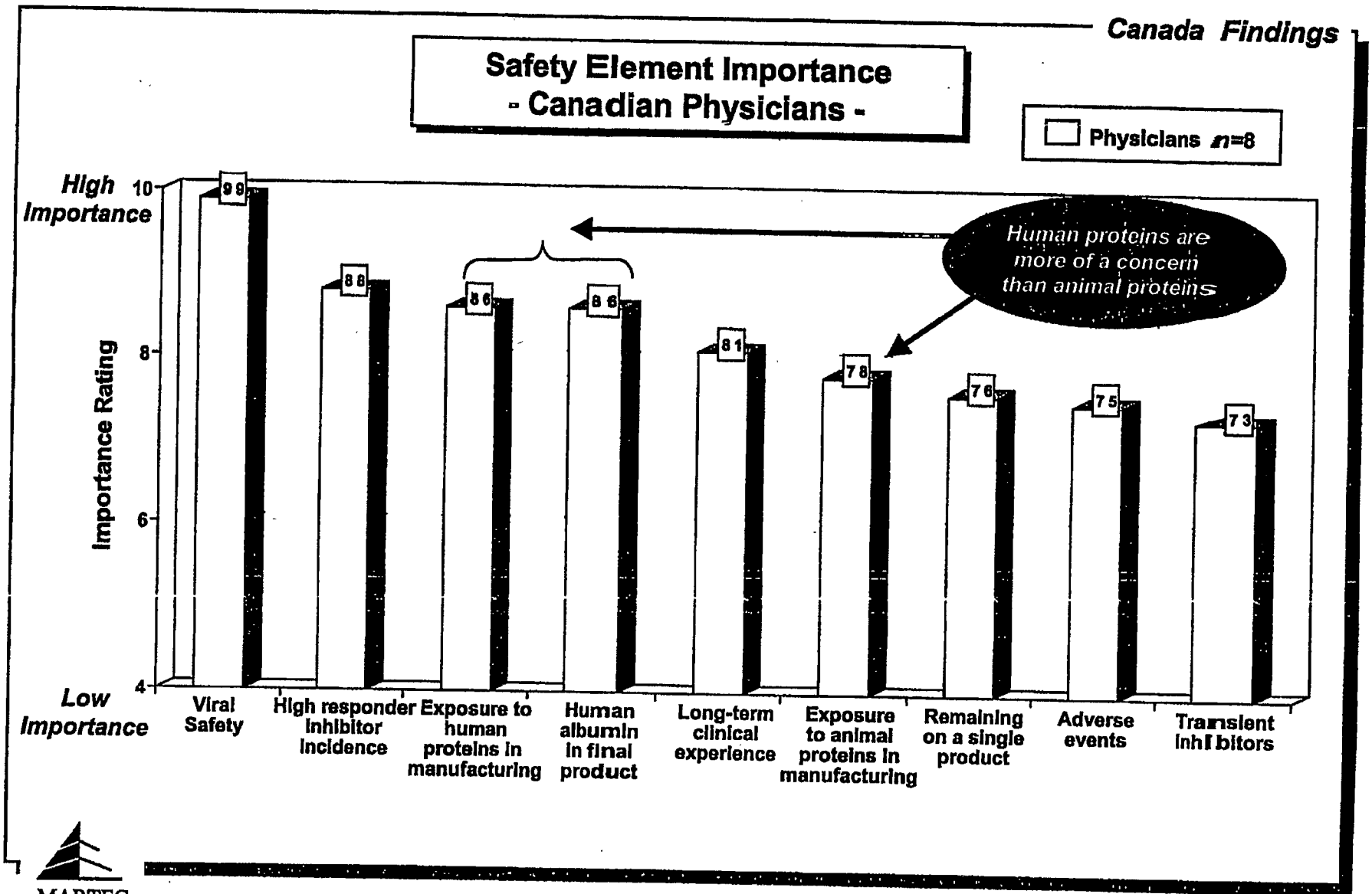
When thinking of safety, Canadian professionals think of both *viral safety* in general, and *contains less/no human proteins* specifically.

Canada Findings



MARITC

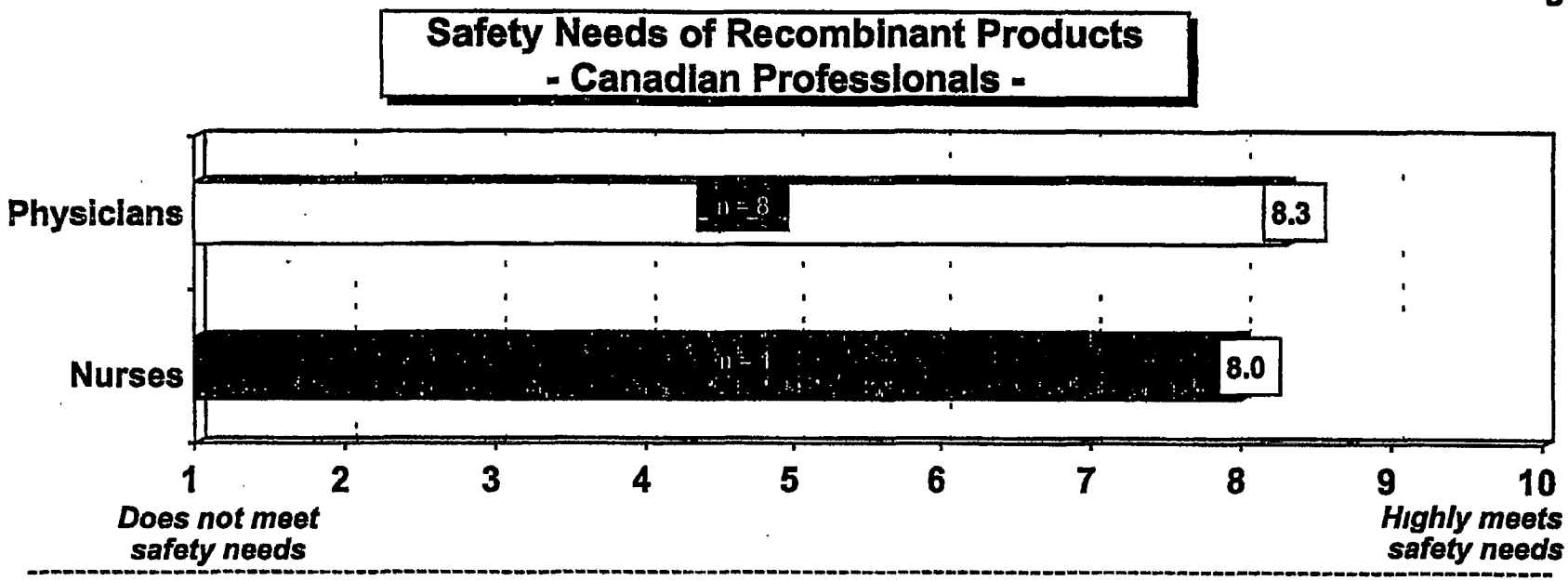
Beyond *viral safety*, all other safety elements pale in importance.



GH001185

Recombinant products are not viewed as totally safe.

Canada Findings



Comments

"The products still contain albumin and use human plasma in production, so there is still a risk "

"In Canada, there's a bit of a lack of confidence in Kogenate because of the CJD contamination "

"The products still use albumin as a stabilizer and human protein is still in the culture media "

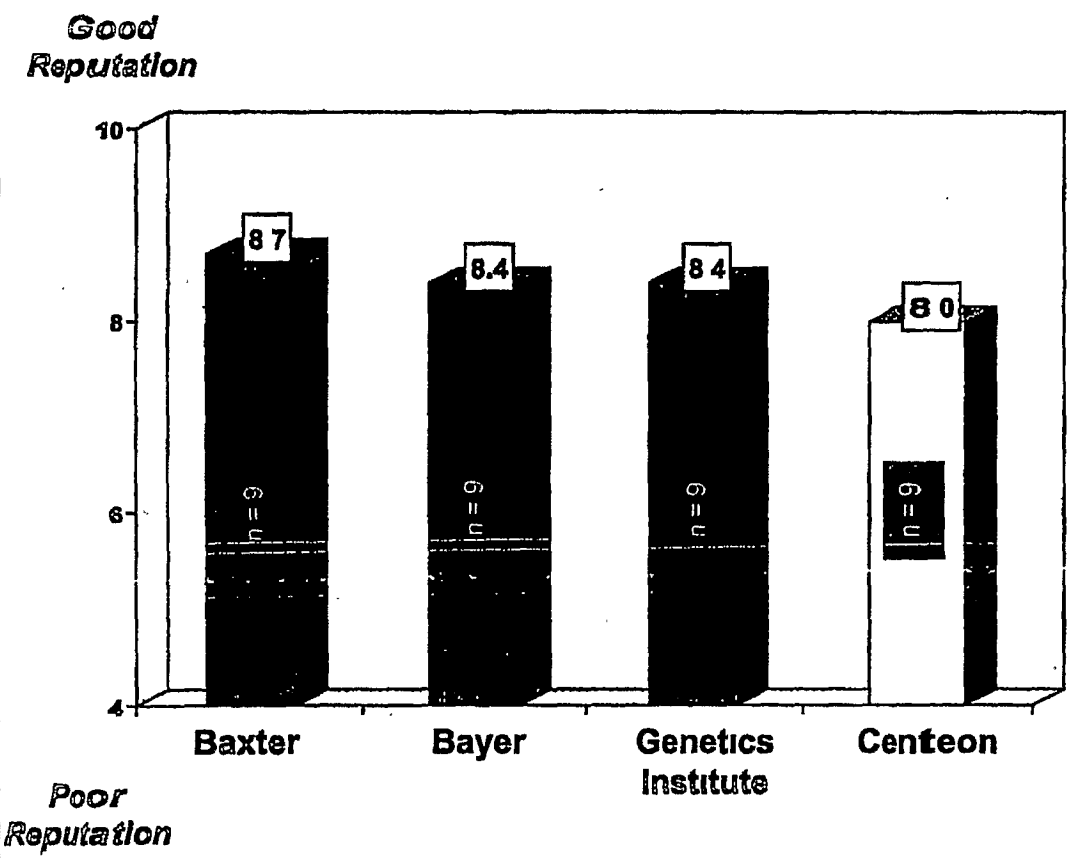
- Canadian Nurse

MARTI C

Baxter receives the highest reputation ratings from Canadian professionals. This is because Baxter is not remembered as having any recent problems.

Canada Findings

Company Reputation
- Prompted -



Comments

"Centeon has had more problems with availability than the others "

"GI is not primarily a blood products supplier and lacks the knowledge and experience of Baxter and Bayer in the hemophilia market "

"Bayer has had problems with CJD Centeon used to be Armour and they had a big viral problem in 1987 "

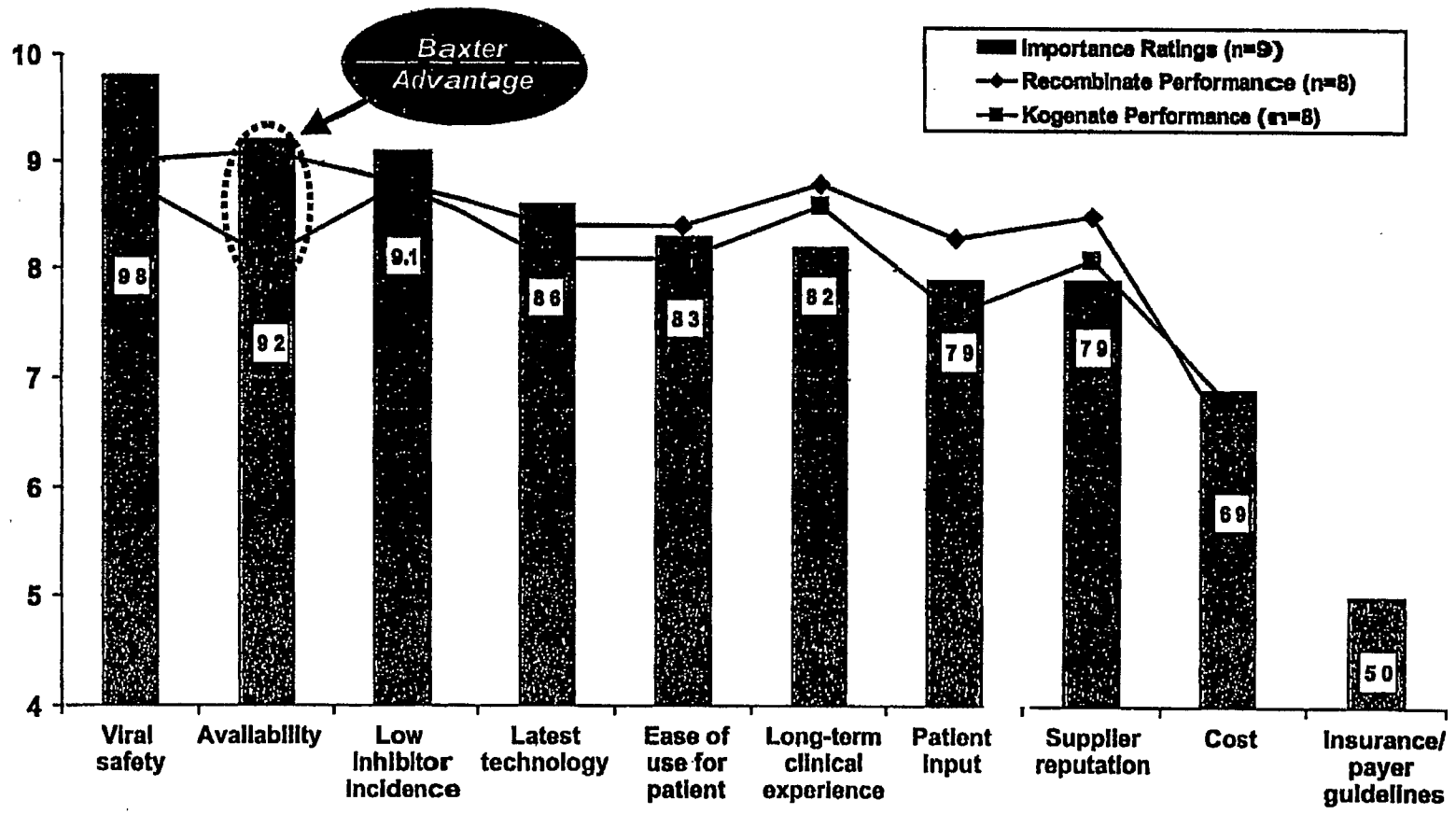
- Canadian Nurse

MARTEC

Canadian physicians give Recombinate slightly higher performance ratings in every category except *Cost*.

Canada Findings

Canadian Professional Key Switching Criteria - Importance and Performance -



Performance was not asked for on Insurance Guidelines

MARKET

One Canadian respondent expressed concern of CJD and prions as a selection criteria.

Other Selection Criteria - Not from List Provided -

Canadian Professionals

- **Concern of CJD** 11%
- **Concern of prions** 11%
- **Product half-life** 11%

n = 9

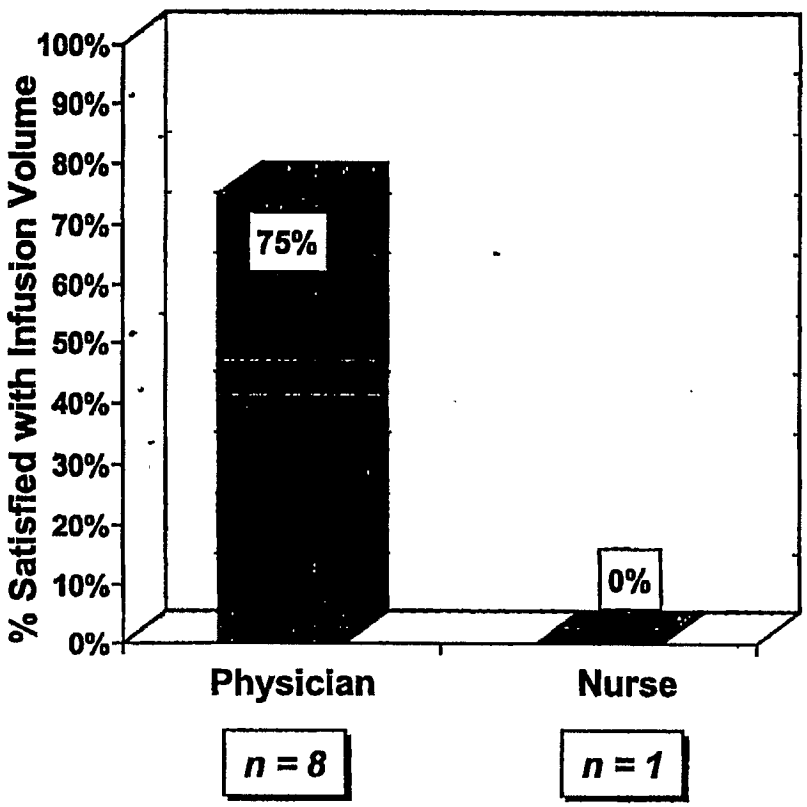
MARTEC

GH001189

One third of Canadian respondents expressed the need for smaller infusion volumes.

Canada Findings

Infusion Volume



Comments

"Need 5 ml instead of a 10 ml size."
- Canadian Nurse

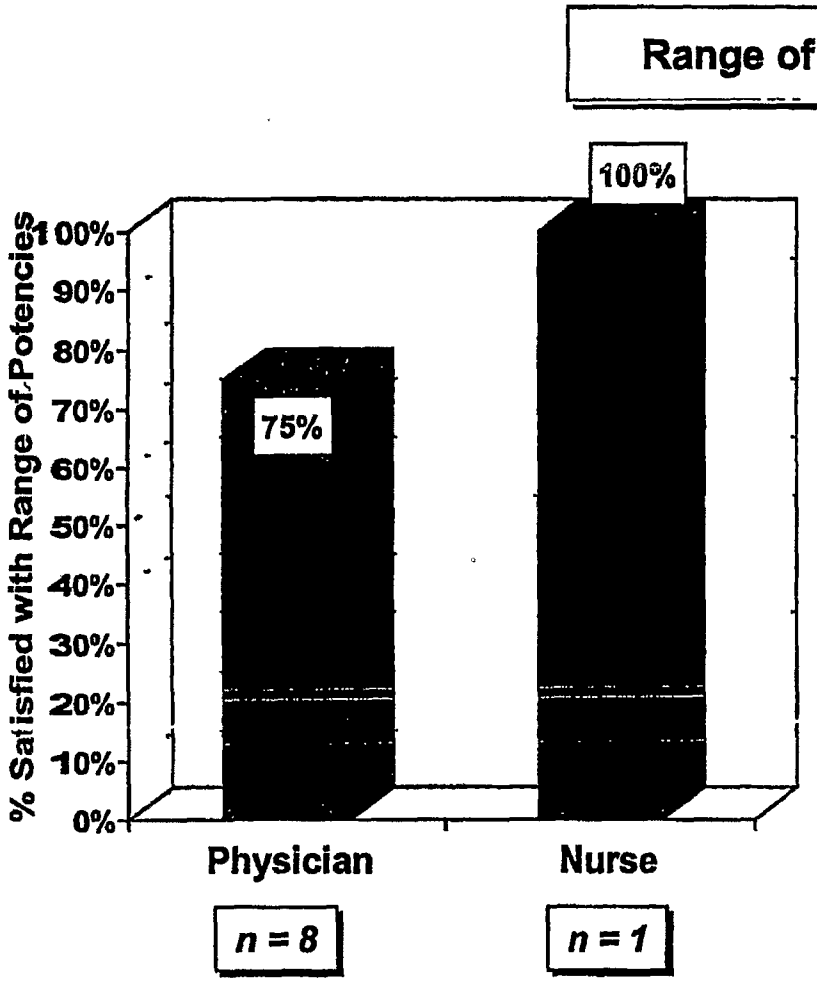
"Would like less fluid than what we currently use (10 ml)."

"For very young patients, a 2 5 ml size would be nice "

MARITZ

A couple of Canadian physicians expressed dissatisfaction with the current range of potencies available.

Canada Findings



Improvements

- ***Lower potency sizes (50, 100, 150 IU)*** ***- 11%***
- ***Greater variety of potency sizes (150, 750 IU)*** ***- 11%***

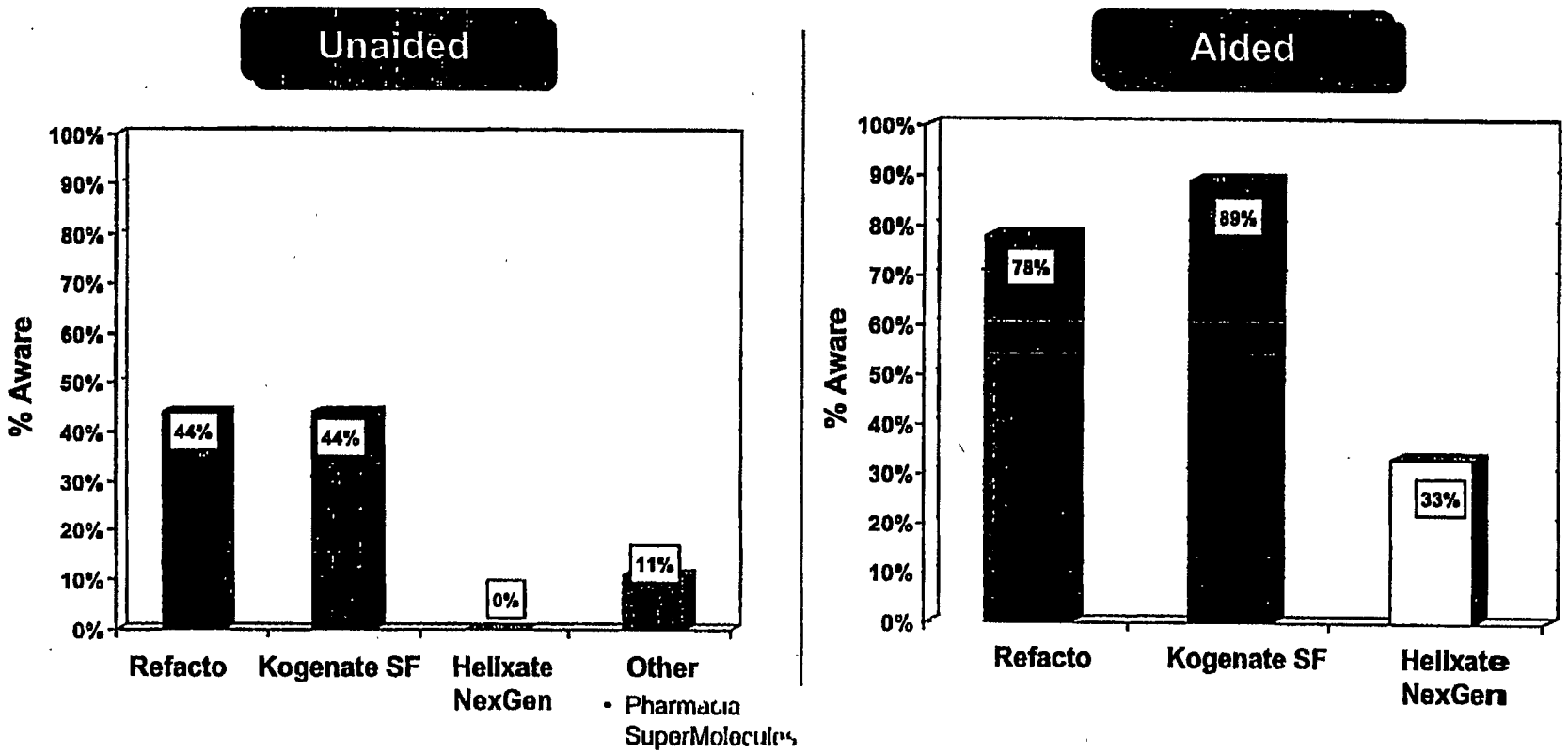
MARTEC

GH001191

Awareness of Kogenate SF and Refacto were similar among this sample of Canadian professionals.

Canada Findings

New Product Awareness
- Canadian Professionals -



n = 9

MARITC

The greatest belief among Canadian professionals about Kogenate SF and Refacto is that they will be albumin free. Few respondents had knowledge of Helixate NexGen.

Canada Findings

Current Knowledge of New Products - Canadian Professionals -

Kogenate SF

- ***Albumin free*** ***56%***
- Less albumin 44%
- Sucrose as stabilizer 44%
- No answer 11%
- Heard of, but nothing specific 11%
- New, improved treatment process 11%
- No animal proteins 11%
- May impact renal function 11%
- Can't continuously infuse 11%

Refacto

- ***Albumin free*** ***22%***
- Uses smaller molecule 22%
- No answer 22%
- Heard of, but nothing specific 22%
- Not FDA approved 11%
- More concentrated/ Less volume needed 11%

Helixate NexGen

- No answer 67%
- ***Albumin free*** ***22%***
- Sucrose as stabilizer 11%
- Heard of, but nothing specific 11%
- May impact renal function 11%
- Can't continuously infuse 11%
- May have higher risk of inhibitors 11%

% of respondents mentioning

n = 9

MARTEC

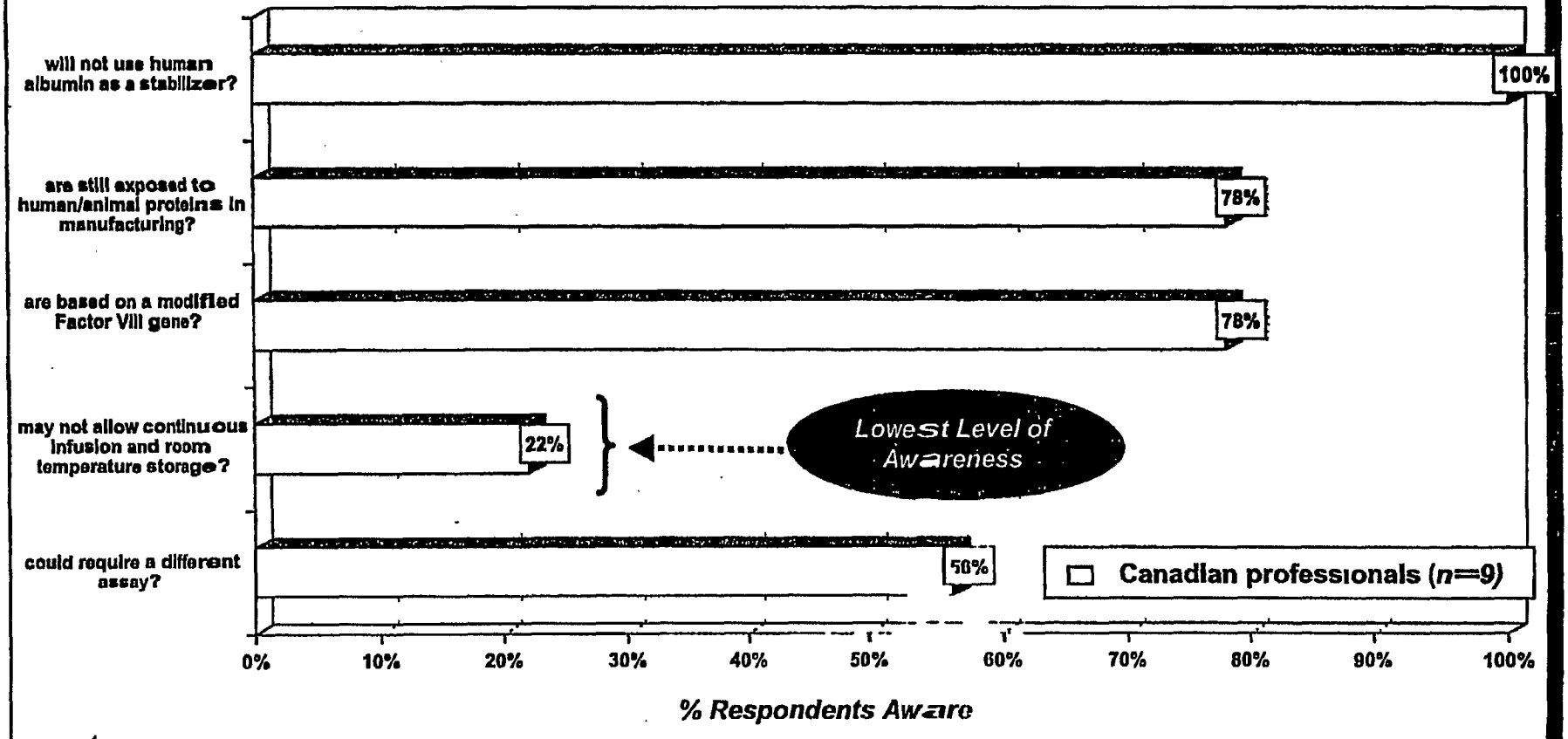
GH001193

New product awareness among Canadian professionals is similar to that of U.S. professionals.

Canada Findings

New Product Awareness

Are you aware that certain reformulated recombinant Factor VIII concentrates...



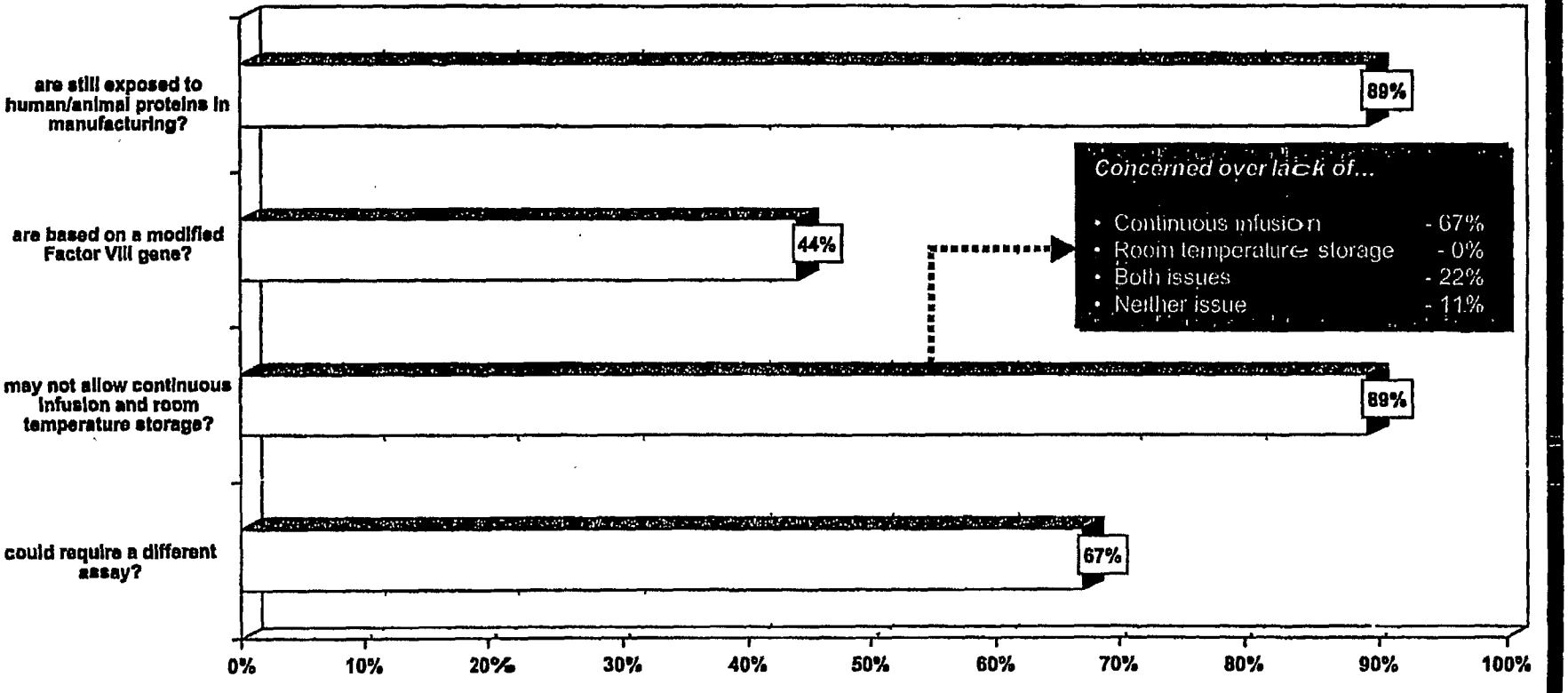
MARITC

Canadian professionals are more concerned than Americans with *exposure to human/animal proteins in manufacturing*, but less concerned with *requiring a different assay*.

Canada Findings

New Product Concerns

Is it a concern to you that certain reformulated recombinant Factor VIII concentrates...



MARTEC

GH001195

Canadian physicians explain their concerns . . .

New Product Concerns
- Canadian Professionals -

Comments/Quotes

"It's good not to use albumin as a stabilizer as long as there is something else to stabilize the product. If it's not stable, do you need to use more product and increase the cost per treatment?"

"The public will still be concerned of any product using human or animal proteins. The recent CJD incident with Kogenate will strengthen that concern."

"The initial concern in deleting the B-domain was there were going to be many more inhibitors. But I think they have done enough studies to show that is not the case"

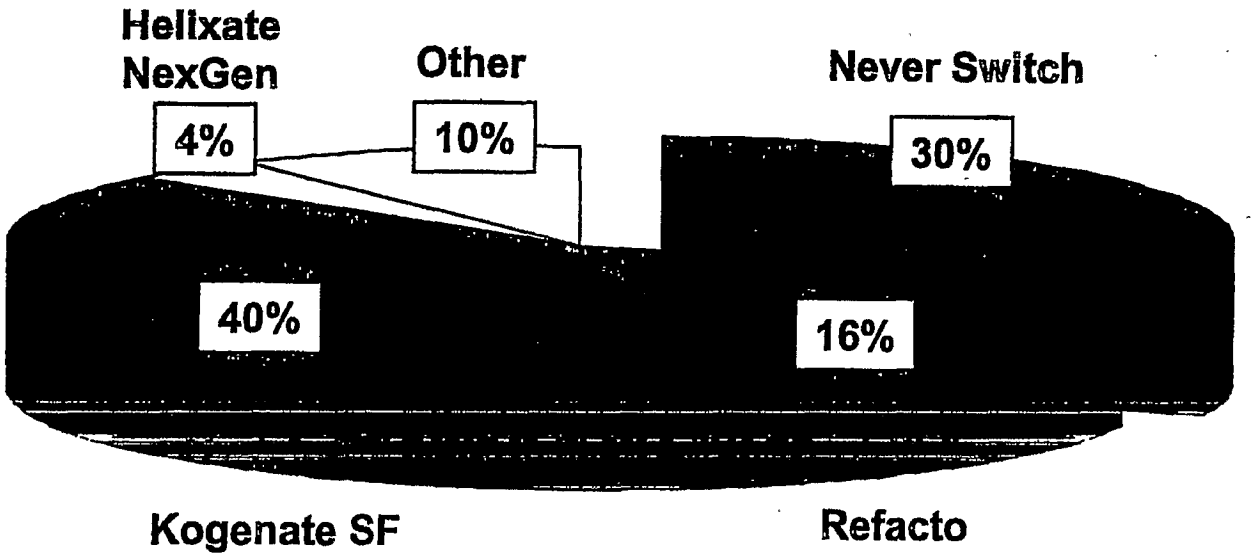
"Not being able to continuously infuse would be a concern. If the product is not stable it would make infusion difficult having to use a bolis"

"It will be difficult to assess a patient if the assays are showing two completely different results It would also be confusing and costly for the lab to get the new equipment"

On average, Canadian professionals expect 30% of their patients not to switch to a reformulated product. Kogenate SF is clearly most likely to be the product of choice for those that do switch.

Canada Findings

What % of Patients Will Switch to Each Product?
- Canadian Professionals -



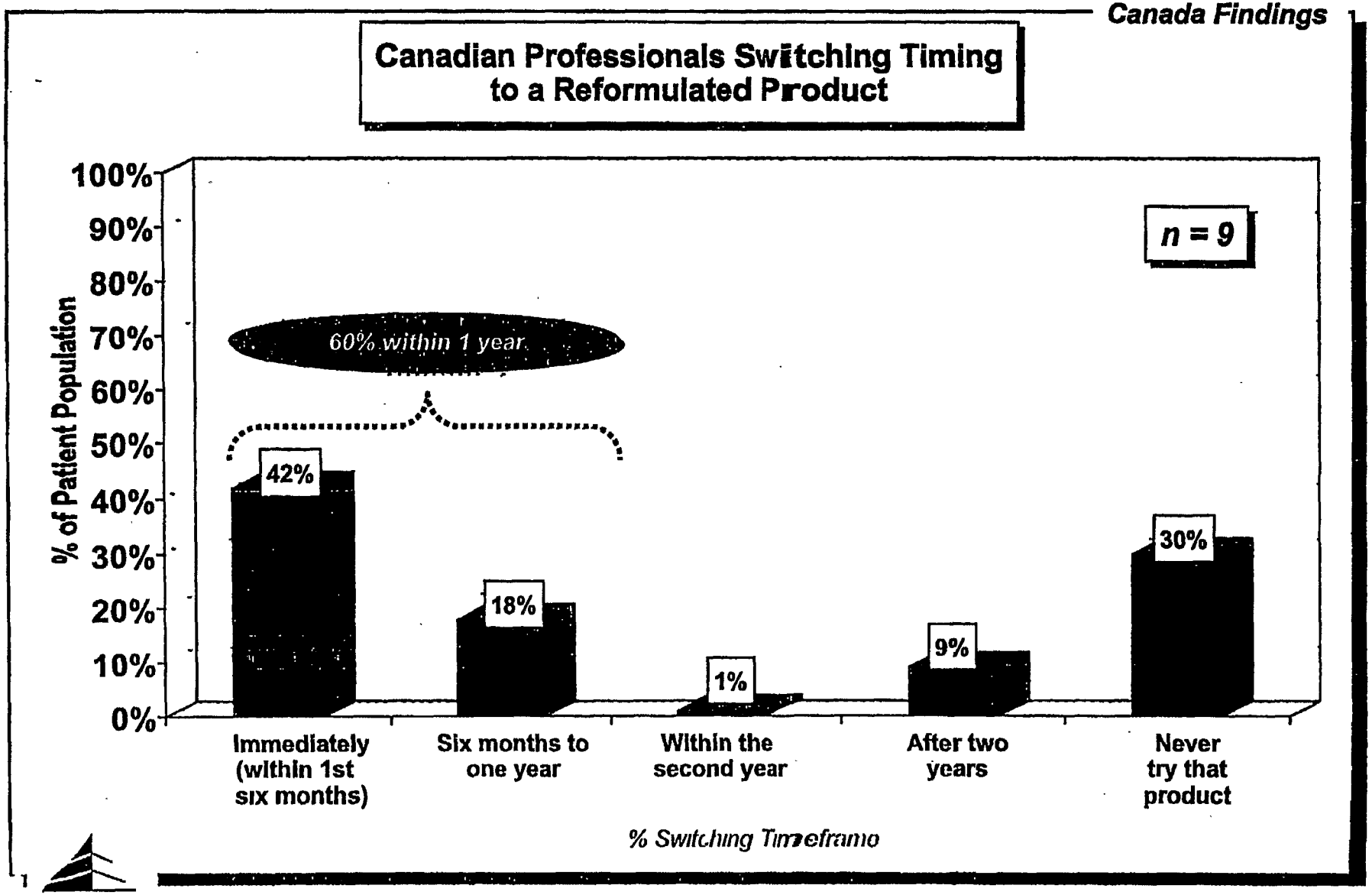
n = 9

MARTEC

GH001197

Canadian professionals expect 60% of their patients to switch to a reformulated product within one year.

Canada Findings



MARITZ

GH0O 1198

Many factors will influence the speed at which patients switch.

Canada Findings

Canadian Professionals Switching Timing
- Explanations -

Comments/Quotes

"Those that do switch will want to switch right away."

"We always have a group that is scientific and eager to try new things "

"We have a certain population that is always looking for a product that has the smallest amount of human plasma in it and they will switch right away. A small number will want to see how it works first, before trying it "

"There is no hurry, these patients have already been exposed to human albumin so it does not matter There is no huge difference, so I would recommend using up the previous products before switching to the new "

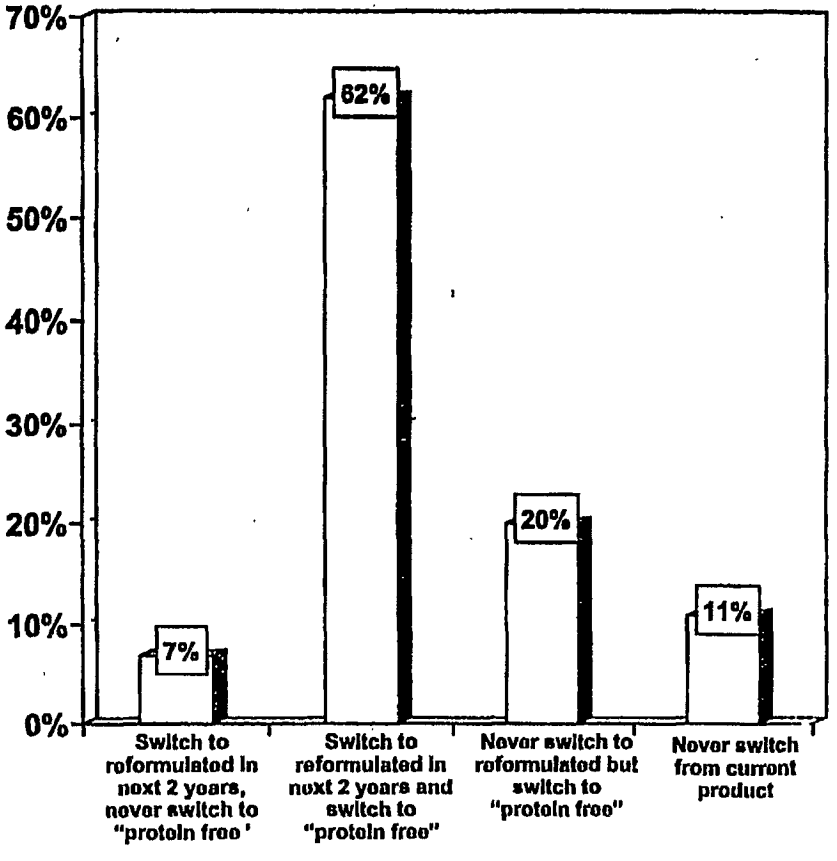
"It really depends upon supply The more new product available, the sooner people will switch."

MARTEC

Canadian professionals expect nearly two-thirds of their patients to switch first to the reformulated product and then to the protein free.

Canada Findings

Switching Scenarios
- Canadian Professionals -



n = 9

Comments/Quotes

"Given the chance, patients will always want to use the safest product. They will put pressure on us as hematologists to switch them"

"Most patients will switch and take gradual steps to the purest product Protein free is the goal, but any improvement along the way helps" - Canadian Nurse

"There would be only some that would switch initially if they knew a protein free product would be available soon"

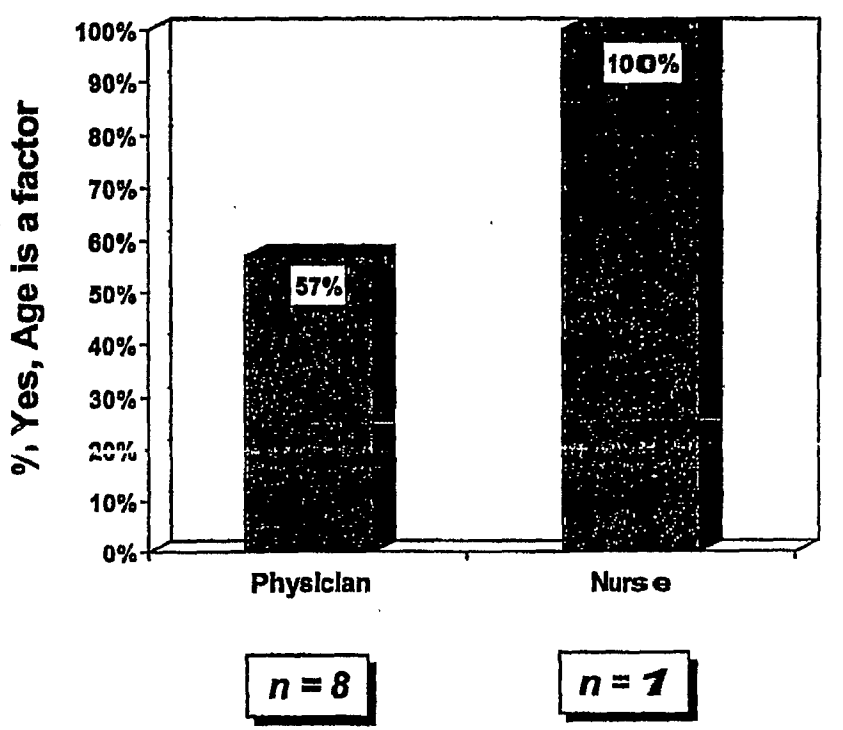
MARTEC

Age can play a factor in the switching decision, but often is only part of the equation. *Availability*, *cost* and *previous infections* are also factors.

Canada Findings

Is Patient's Age a Factor In Deciding to Switch Products?

Canadian Professionals



Comments

Comments/Quotes

"I'll be less likely to encourage switching for my older patients already exposed to diseases"

"If there were only a limited amount of the product, the children would be switched first" - Canadian Nurse

"We would be more willing to start PUPs on the reformulated products first"

"No Canada offers the best product to everyone, regardless of age"

MARTEC

GH001201

Canadian professionals indicate Kogenate SF may be the preferred product from PUPs.

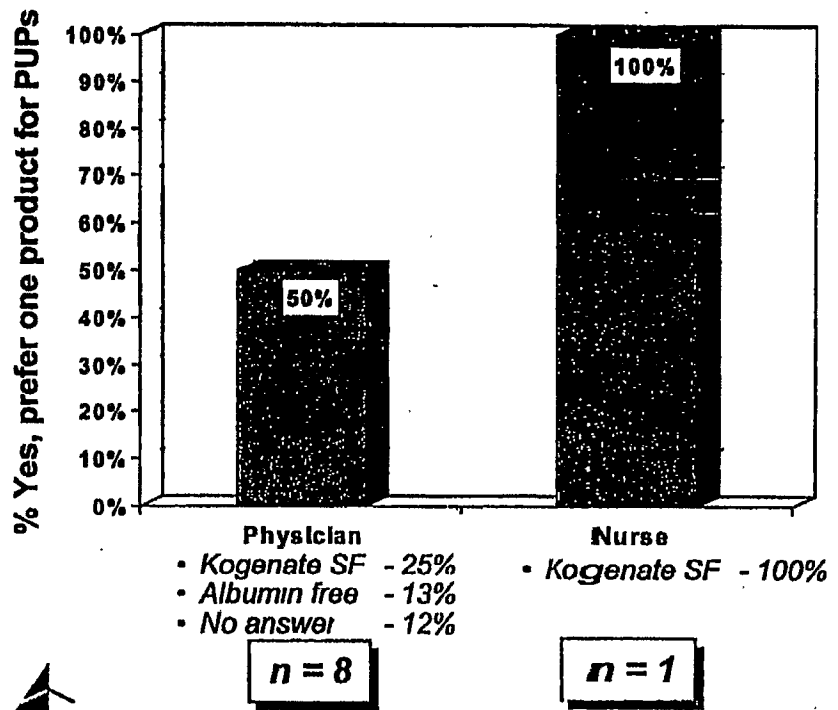
Canada Findings

Will One Reformulated Products be Preferred for PUPS?

% Newly Diagnosed on Reformulated?

Physicians - 81%

Nurses - 100%



Comments

Comments/Quotes

"The decision is made at the CDS level Based on our past contract with Bayer, it will likely be Kogenate SF"

- Canadian Nurse

"It will depend on availability and we will probably only have Kogenate SF available"

"I don't have enough knowledge about the new product to say"

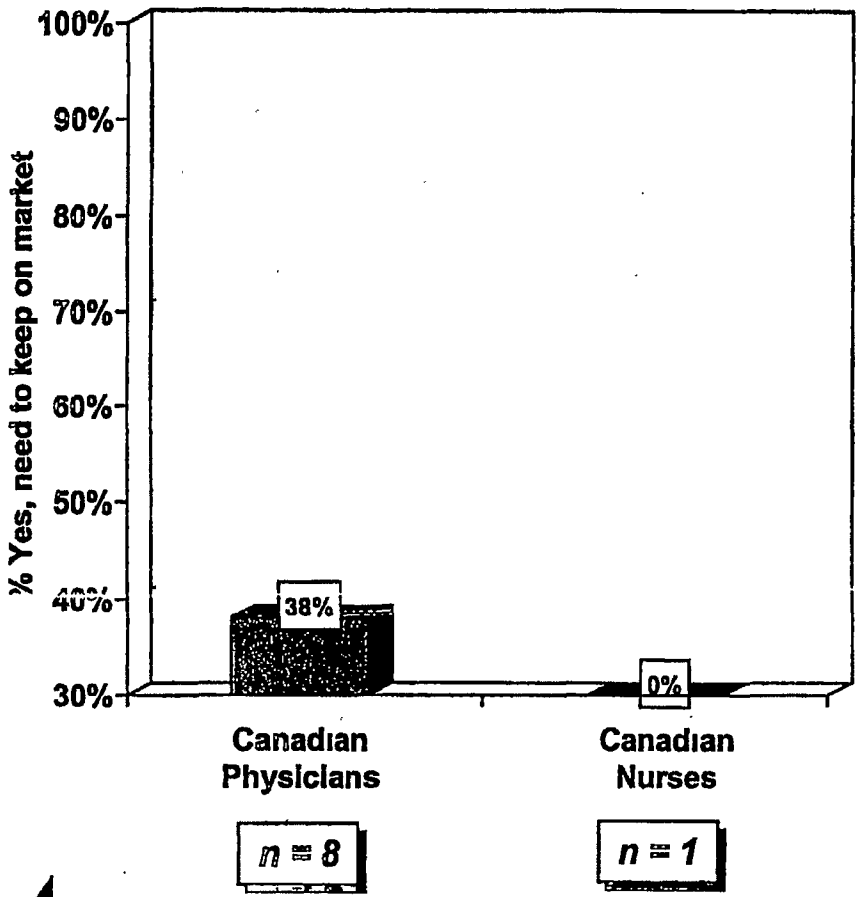
"We have used Kogenate in the past and feel comfortable with it, so it will make sense to go with Kogenate SF"

MARKET

Overall, Canadian professionals don't see need to keep previous products available.

Canada Findings

Need to Keep Previous Generation Products on Market?



Comments/Quotes

"No need to keep the older one around unless people react unexpectedly to the new product Patients will want the cleanest and purest product available"

"I see no benefit of keeping a less pure product on the market"

- Canadian Nurse

"We need to keep the older products on the market for 1 to 2 years to see how patients react to the new product"

MARTEC

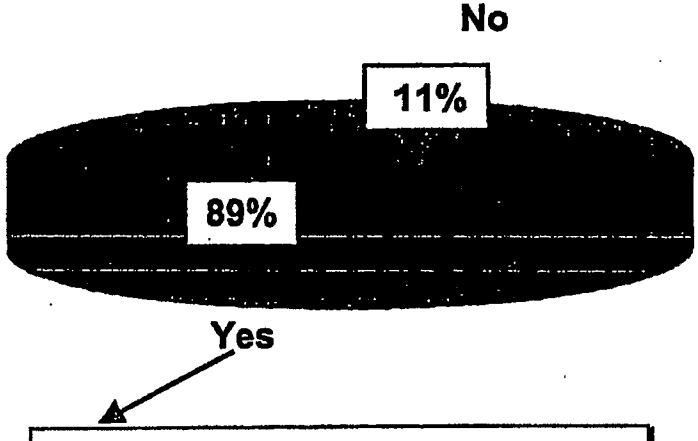
GH001203

Canadian professionals generally saw the inability of the new products for *continuous infusion* as more of a limitation than *room temperature storage.*

Canada Findings

Convenience Features with New Products - Canadian Professionals -

Will lack of these features influence your opinion of the new products?



% concerned over lack of...	
– Continuous infusion	33%
– Room temperature storage	11%
– Both issues/ one not specified	45%

n = 9

Comments/Quotes

"This would be a serious issue. You would have to then keep Kogenate around for serious cases and surgeries."

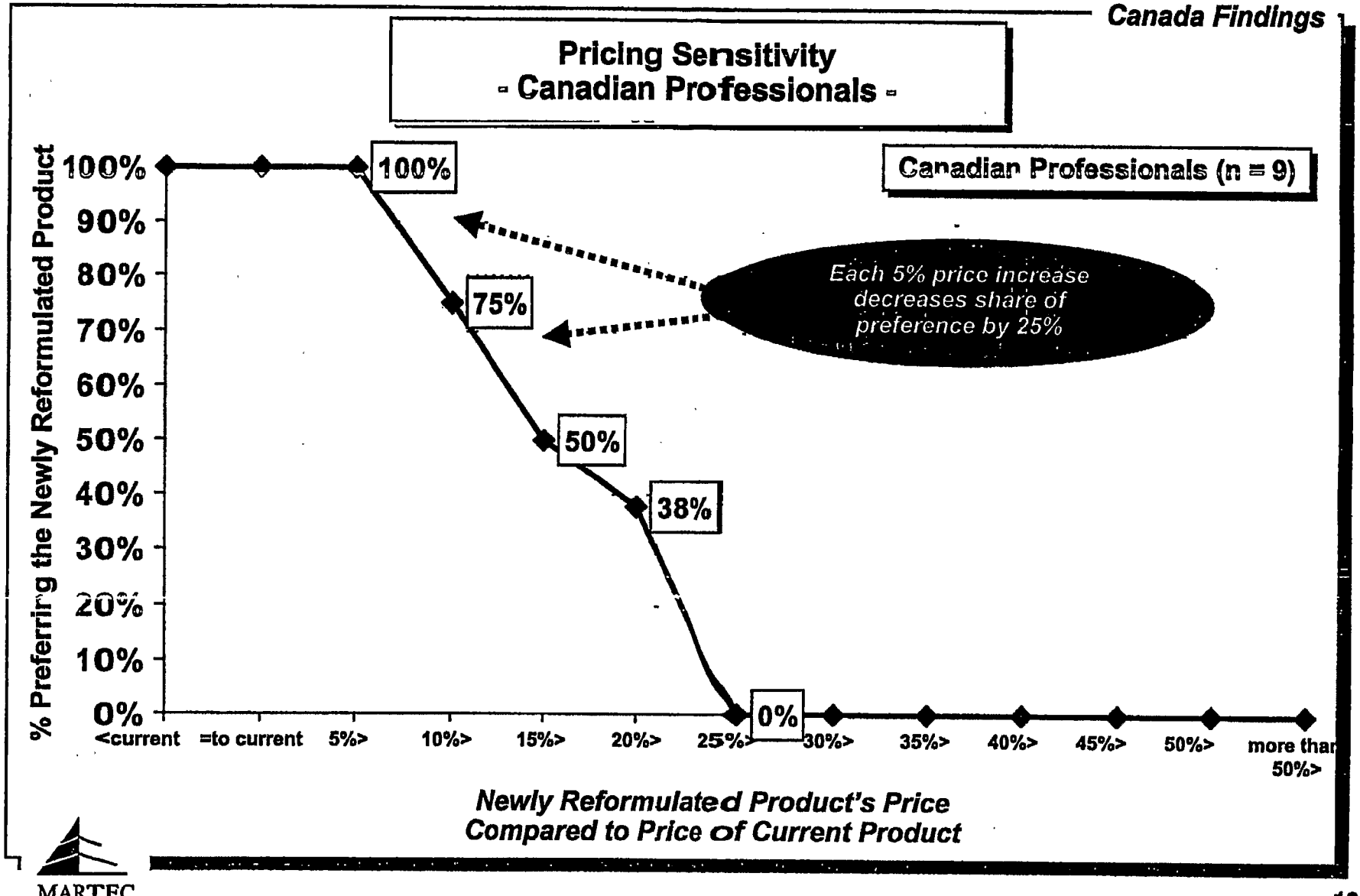
"These are problems. We would have to go back to the old products or find a new product that enabled these features."

"Lack of room temperature storage would be a real issue for our patients on the go They probably would not switch "

"I'd still go with the safer product Everyone has a refrigerator and continuous infusion is not that big of an issue because we perform very few pediatric surgeries "

MARITZ

All Canadian respondents were willing to pay a 5% premium for the reformulated product. However, a 20% premium was the maximum.



MARTEC

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In Canada's social medical program, a price premium is possible, but it must be justified.

Pricing Sensitivity Comments

Comments/Quotes

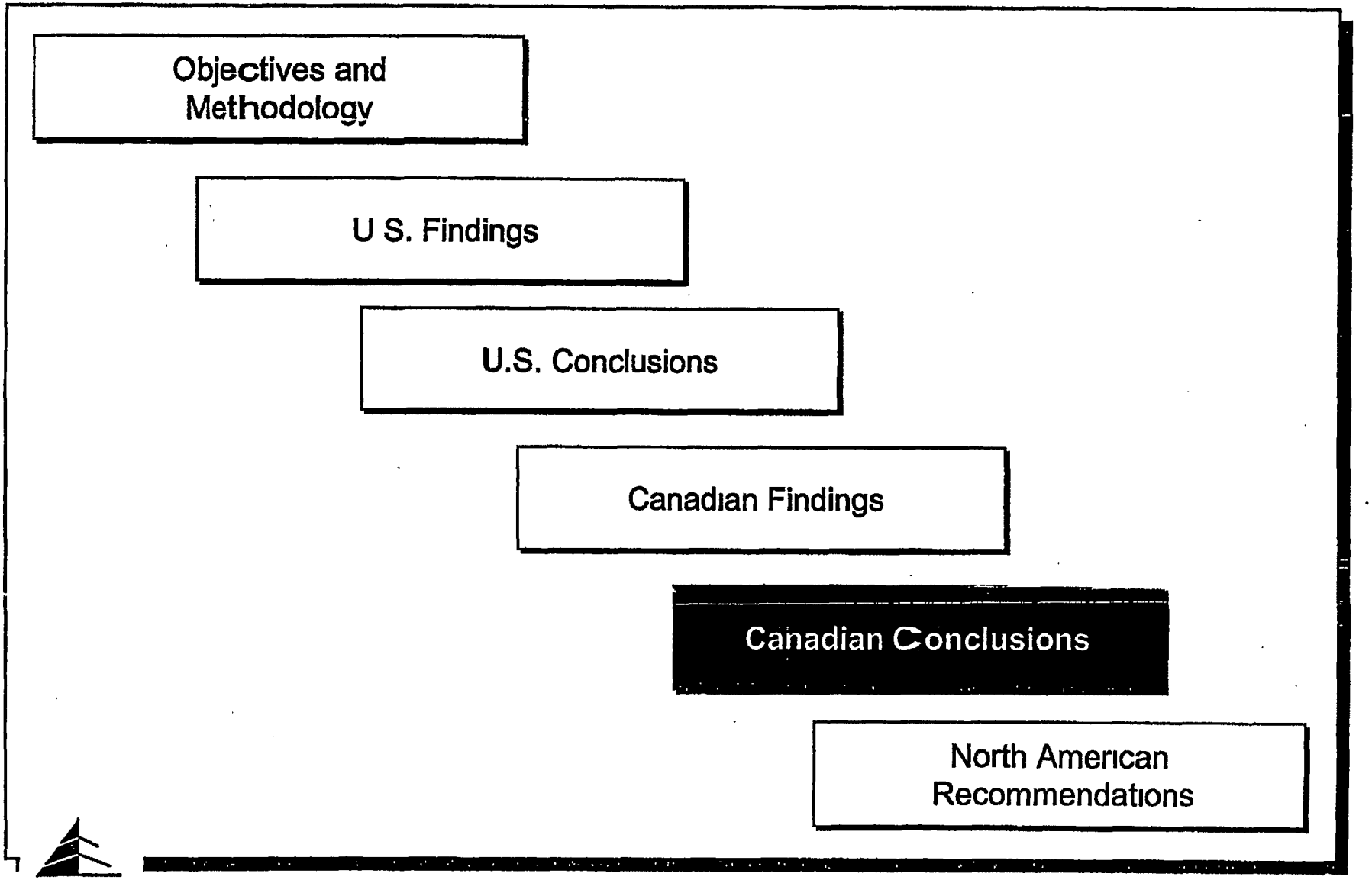
"At least in Canada, there's always the balance of the theoretical safety you want to achieve with the amount of money you will pay. There have been no documented transmissions of diseases from albumin, so maybe a 10% premium for the new product is as high as you could go"

"Depends upon consumer demand We went to a product that was 200% more expensive when we went from monoclonal to recombinant. Maybe a 10% premium is reasonable."

"Patients do not pay for their products here As a Canadian doctor I'd choose the best product for my patient As a member of society, I would pay 20% more for the reformulated products"

"The new product must be fiscally responsible A 20% premium is a lot to spend for the new products"

Agenda



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In many ways, Canadian professionals are similar to U.S. professionals. However, some key differences exist...

Conclusions

Key Canadian Findings

- Recombinant use is very high in Canada (96%)
- Over 60% of Canadian professionals' patients are Kogenate users in this sample
- *Human proteins* are more of a concern than *animal proteins*, but unprompted *concern of CJD* was mentioned also (22%)
- Baxter receives high reputation ratings because of no recent problems (*problems included CJD with Bayer and manufacturing with Centeon*)
- *Cost* received lower importance ratings in Canada than in the U S.
- Product name and product issue awareness is very similar to U S
- Concern over *exposure to human/animal proteins in manufacturing* is higher than in the U S
- Concern over the *use of a different assay* is lower than in the U S
- Switching to Kogenate SF is much more likely than switching to Refacto; even among PUPs
- Switching timing is expected to occur faster in Canada, with 63% of patients switching within 1 year
- Physicians expect more patients to switch both to the reformulated product and again to the "protein free" (62%), versus wait for the "protein free" (20%)
- Lack of convenience features is a big concern, with inability for *continuous infusion* much more so than *no room temperature storage*
- Canadian physicians are the least price sensitive of all regions studied, with 75% willing to pay a 10% premium
- Kogenate SF will provide the greatest threat to Baxter due to Kogenate's strong position in this market and likelihood to be the first new product to market

MARITZ

Agenda

- Objectives and Methodology
- U.S. Findings
- U S. Conclusions
- Canadian Findings
- Canadian Conclusions
- **North American Recommendations**

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North American Project Recommendations

Recommendations

Baxter can make several marketing moves to slow the acceptance of Kogenate SF, Refacto and Helixate NexGen, perhaps buying more time than the current window. Specific strategies include:

- Immediately publicize to physicians, nurses and patients that Baxter is developing a "protein free" product... ***get the word out.***
- Use proactive and defensive marketing tactics to control the speed at which Recombinate users switch to competing reformulated products ***act on the drivers and barriers that Baxter can influence.***
- Work vigorously on a "protein free" product with the critical goal of being the first to market ***.be the R&D leader.***

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North American Recommendations (continued)

Recommendations

Get the Word Out

- publicize to physicians, nurses and patients that Baxter is developing a "protein free" product and educate everyone on Baxter's new product as early as possible

Proactive Marketing Efforts

- continue promoting Recombinate's track record and Baxter as an established FVIII manufacturer
- continue developing brand identity and loyalty for Recombinate, particularly among professionals
- differentiate via patient education and convenience features (*5 ml infusion volumes, a greater selection of potencies, smaller packaging and improved reconstitution/syringe system*)

Defensive Marketing Efforts

- educate about the *use of human/animal proteins during manufacturing*, refuting (or weakening) the claims that new products will be "albumin free"
- educate about the *use of a modified gene* in new products
- educate about Kogenate SF's potential inability for *continuous infusion* (physician focus) and *room temperature storage* (patient and nurse focus)
- raise questions about the problems of a *different assay* for Refacto
- raise questions with physicians about the risks of taking patients off of a single product versus the unsubstantiated reward of an incrementally safer product
- raise questions with physicians about the availability of the newly reformulated concentrates
- raise questions about GI's ability to supply and its commitment to the hemophilia market
- make all efforts to delay the introduction of the reformulated products (*i e question how Refacto can pass trials in the US using different assays, refute the trial results of all new products*)
- if share is slipping rapidly, price Recombinate 10% lower than the reformulated products

North American Recommendations (continued)

Recommendations

Shorten the Window of Exposure

- Physicians and patients need time to review clinical trials prior to switching to a new product If Baxter can get its product to market within the two year window it can potentially avoid losing a large share of its customers.
- It typically takes a full year for a physician to see each patient and discuss new products and switching. Take advantage of this time to educate, build loyalty and raise doubts about the true benefits of the reformulated products

First to Market with "Protein Free"

- A "protein free" FVIII concentrate will be seen as a major step-change improvement in safety
- The first company to market with a totally human/animal protein free product should be able to capture a very large percentage of switching patients in a one year time frame, capitalizing on a "first comer" advantage
- Being first to market with a totally safe product would also greatly strengthen the company's reputation and position it as the leader in the Factor VIII replacement market

***

This concludes the presentation.
Thank you very much

***

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Appendix

- North American Professional Respondent List -

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GH001213

1999 Baxter Global Hemophilia Study
North American Professional Respondent List

Appendix

US	Dr Lusher	Physician	Children's Hospital	Detroit	MI		*Pilot*
US	Hassan Yaish, MD	Physician	Henry Ford Hospital	Detroit	MI		*Pilot*
US	Sandy Harris, RN	Nurse	Northwestern University	Chicago	IL		*Pilot*
US	Beth Chase, RN	Nurse	Oakland Children's Hospital	Oakland	CA		*Pilot*
US	Leonard Valentino, MD	Physician	Rush Presbyterian	Chicago	IL	313-942-3569	*Pilot*
US	Marion Koerper	Physician	University of California	San Francisco	CA		*Pilot*
US	Name Withheld	Physician	University of Michigan	Ann Arbor	MI		*Pilot*
US	Berlinda McAdory, RN	Nurse	Arkansas Children's Hospital	Jacksonville	AR	501-320-5961	
US	Kimo Stine, MD	Physician	Arkansas Children's Hospital	Sherwood	AR	501-320-1495	
US	Michael Recht, MD	Physician	Phoenix Children's Hospital	Phoenix	AZ	602-239-2400	
US	Rachel Stuart, RN	Nurse	Phoenix Children's Hospital	Phoenix	AZ	602-239-2546	
US	Terry Scott Wood, MD	Physician	Phoenix Children's Hospital	Phoenix	AZ	602-239-5791	
US	John Hutter, MD	Physician	University of Arizona	Tucson	AZ	520-626-7637	
US	Mary Ellen O'Leary, RN	Nurse	Alta Bates Medical Center	Berkley	CA	510-237-2826	
US	Vicky Leonard, RN	Nurse	Children's Hospital Oakland	Berkley	CA	510-428-3378	
US	Ellen Bolotin, MD	Nurse	Children's Hospital of LA	Grenada Hills	CA	323-669-5639	
US	Robert Miller, PA	Physician	Children's Hospital	Los Angeles	CA	323-669-2121	
US	Robert Mignacca, MD	Nurse	Valley Children's Hospital	Madera	CA	559-225-3000	
US	Catherine Glas, RN	Nurse	UCSD Medical Center	San Diego	CA	619-294-6479	
US	Susan Karp, RN	Nurse	University of CA at SF	San Francisco	CA	415-476-5861	
US	Julie Hambolten, MD	Physician	University of California	San Francisco	CA	415-476-9608	
US	Arnold J Altman, MD	Physician	Connecticut Children's Med Ctr	Hartford	CT	860-545-9616	
US	Philip Blatt, MD	Physician	Christian Care Health Center	Newark	DE	302-999-8095	
US	Joann Davis, MD	Physician	University of Miami	Plantation	FL	954-473-9795	
US	Cameron Tebbi, MD	Physician	Tampa Children's Hospital	Tampa	FL	813-870-4824	
US	Valerie Cronshaw, RN	Nurse	Medical College of Georgia	Augusta	GA	706-721-7367	
US	Charlton Davis, MD	Physician	Scottish Wright Children's Med	Dunwood	GA	404-257-3230	
US	Alton Lightsey, MD	Physician	Medical College of GA	Evans	GA	706-855-6860	

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North American Professional Respondent List (continued)

US	Dr Thomas Kisker	Physician	University of Iowa	Iowa City	IA	319-356-3422
US	Susan Gamerman, RN	Nurse	Children's Memorial Chicago	Chicago	IL	773-880-4620
US	Dr Debra Brown	Physician	Children's Memorial Hospital	Chicago	IL	773-880 3977
US	Anita Bontuyan, RN	Nurse	Michael Reese Hospital	Chicago	IL	312-791-2384
US	Ruth Seeler, MD	Physician	U of Chicago/Michael Reese	Chicago	IL	773-521-1710
US	Mary Siprlani, MD	Physician	Jackson Park Hospital	Park Ridge	IL	847-318-0477
US	Dr Michael Tarantino	Physician	Comprehensive Hemophilia Ctr	Peoria	IL	309-692-4533
US	Cindy Leissinger, MD	Physician	Tulane University	Metaine	LA	504-588-5498
US	Karen Wulff, RN	Nurse	Louisiana Hemophilia Center	New Orleans	LA	504-588-5433
US	Carol Sweeney-McGreal, RN	Nurse	Boston Hemophilia Center	Boston	MA	617-355-6101
US	Helen Mahoney-West, RN	Nurse	Brigham Women's Hospital	Boston	MA	617-732-5190
US	Elizabeth Hollomon	Nurse	John Hopkins School of Med	Baltimore	MD	410-502-5114
US	Fred Heldrich, MD	Physician	John Hopkins University/St Agn	Baltimore	MD	410-368-2500
US	Anne Rossi, MD	Physician	Maine Medical Center	Portland	ME	207-885-7565
US	Jim Munn, RN	Nurse	University of Michigan	Ann Arbor	MI	734-936-6393
US	Steven Pipe, MD	Physician	Women's Hospital--U of MI	Ann Arbor	MI	734-647-3809
US	Charles Main, MD	Physician	William Beaumont Hospital	Beverly Hills	MI	248-551-0360
US	Muhammed Shurafa, MD	Physician	Henry Ford Hospital	Detroit	MI	313-761-1901
US	Rashni Kulkarni, MD	Physician	Michigan State University	East Lansing	MI	517 349 5390
US	Elizabeth Sandon-Kleiboer, RN	Nurse	DeVos Children's Hospital	Grand Rapids	MI	616-391-2033
US	Jane Dinnen, RN	Nurse	Munson Medical Center	Traverse	MI	231-935-7227
US	Nigel Key, MD	Physician	Fairview--University of MN	Minneapolis	MN	612-624-8903
US	Neil Cornell, MD	Physician	Dartmouth Hitchcock Hemophilia	Lebanon	NH	603-560-5522
US	Lauren McKernan, RN	Nurse	Dartmouth-Hitchcock Hemophilia	Lebanon	NH	603-650-5486
US	Dr Jack Golberg	Physician	Cooper Health System	Campten	NJ	609-325-6750
US	Jane Ellen Jones, RN	Nurse	University of New Mexico	Albuquerque	NM	505-272-6420

North American Professional Respondent List (continued)

US	Dr Prasada Mathew	Physician		Albuquerque	NM	505-272-6822
US	Lynn Menza, RN	Nurse	Children's Hospital of Buffalo	Buffalo	NY	716-878-7446
US	Joan McCarthy, RN	Nurse	Mt Sinai	Manhattan	NY	718-268-1879
US	Stephanie Seremetis, MD	Physician	Mt Sinai Women Health Center	New York	NY	212-241-8272
US	Alice Foster, RN	Nurse	Mount Sinai	New York City	NY	212-241-9241
US	Sylvia Jordan, RN	Nurse	Ohio State Univ Hemophilia	Columbus	OH	614-293-8183
US	Nancy Duffy, RN	Nurse	Children's Medical Center	Dayton	OH	937-293-4719
US	Charles Sexauer, MD	Physician	Children's Hospital	Oklahoma City	OK	405-271-5311
US	Regina Butler, RN	Nurse	Children's Hospital of Philadelphia	Philadelphia	PA	215-590-3438
US	Allan Cohen, MD	Physician	Children's Hospital of Philadelphia	Philadelphia	PA	215-590-3438
US	Jackie Iola, RN	Nurse	St Christophers	Philadelphia	PA	215-743-8773
US	Barbara Carroll, RN	Nurse	Children's Hospital	Columbia	SC	803-772-6095
US	Cherys Zimmerman, RN	Nurse	East Tennessee Comprehensive	Knoxville	TN	423-544-9170
US	Jan Tuller, RN	Nurse	University of Tennessee	Memphis	TN	901-448-6454
US	Kim Miller, RN	Nurse	Children's Med Center	Dallas	TX	214-456-5401
US	Marie Ramriez, RN	Nurse	South Texas Comprehensive	San Antonio	TX	210-704-2862
US	Shirley Bleak, RN	Nurse	Primary Children's Med Ctr	Salt Lake City	UT	801-588-2903
US	Kim Stuart, RN	Nurse	Children's Hospital--Kings	Norfolk	VA	757-668-7613
Canada	Morel Rubinger, MD	Physician	Manitoba Cancer Foundation	Winnipeg		204-787-2113
Canada	Dr Jeff Davis	Physician	British of Columbia Children's	Richmond		604-875-3577
Canada	Wilma McClure, RN	Nurse	University of Alberta Hospital	Edmonton		780-407-6588
Canada	Gerry Growe, MD	Physician	Vancouver General Hospital	Vancouver		604-875-4702
Canada	Jack Hand, MD	Physician	Jane Wayne Child Help Center	Saint Johns		709-778-4799
Canada	Dr Koon Hung Luke	Physician	Children's Hospital of E Ontano	Ottawa		613-737-2422
Canada	Dr John Wu	Physician	British Columbia Children's	Vancouver		604-875-3467
Canada	Linda Vickars, MD	Physician	Vancouver Hemophilia Clinic	Vancouver		604-684-2331
Canada	Manuel Carcao, MD	Physician	The Hospital for Sick Children	Toronto		416-813 6910

2nd Gen. Re FVIII

Japan Findings

Final Report

2nd Generation Recombinant Factor VIII Product Introduction Assessment

Japan Findings

Baxter Healthcare Corporation

January 17, 2000

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GH001218

Agenda

Objectives and Methodology

Japanese Findings

Japanese Conclusions and Recommendations

MARITC

The primary goal of this project is to provide Baxter with global market intelligence allowing it to successfully position its recombinant Factor VIII product against competitive next-generation products.

Objectives

The primary objectives of this project are:

- Determine the motivators and drivers of switching behavior. What will cause and prevent switching from Recombinate to a competitive product?
- Understand the perceptions of decision makers on the next generation recombinant products (Kogenate SF, Refacto and Helixate NexGen) coming to market and how this differs from the previous findings

Specific project objectives include:

- Estimate likelihood of switching from Recombinate to new recombinant products
- Compare findings to those of the initial 1998 study, where applicable

This report represents the views of this sample and is just one piece of a strategic marketing plan. Baxter must balance this data with its corporate directives and other internal, competitive and legislative intelligence.